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Educational SCREEN

COMBINED WITH

Visual Instruction News

CONTENTS

Papers from the Denver Meetings of The Department of Visual Instruction

Characteristics in Still Pictures for Instructional Use in the Classroom

The Preparation and Presentation of a Science Night Program

Adaptation of Art to the Classroom

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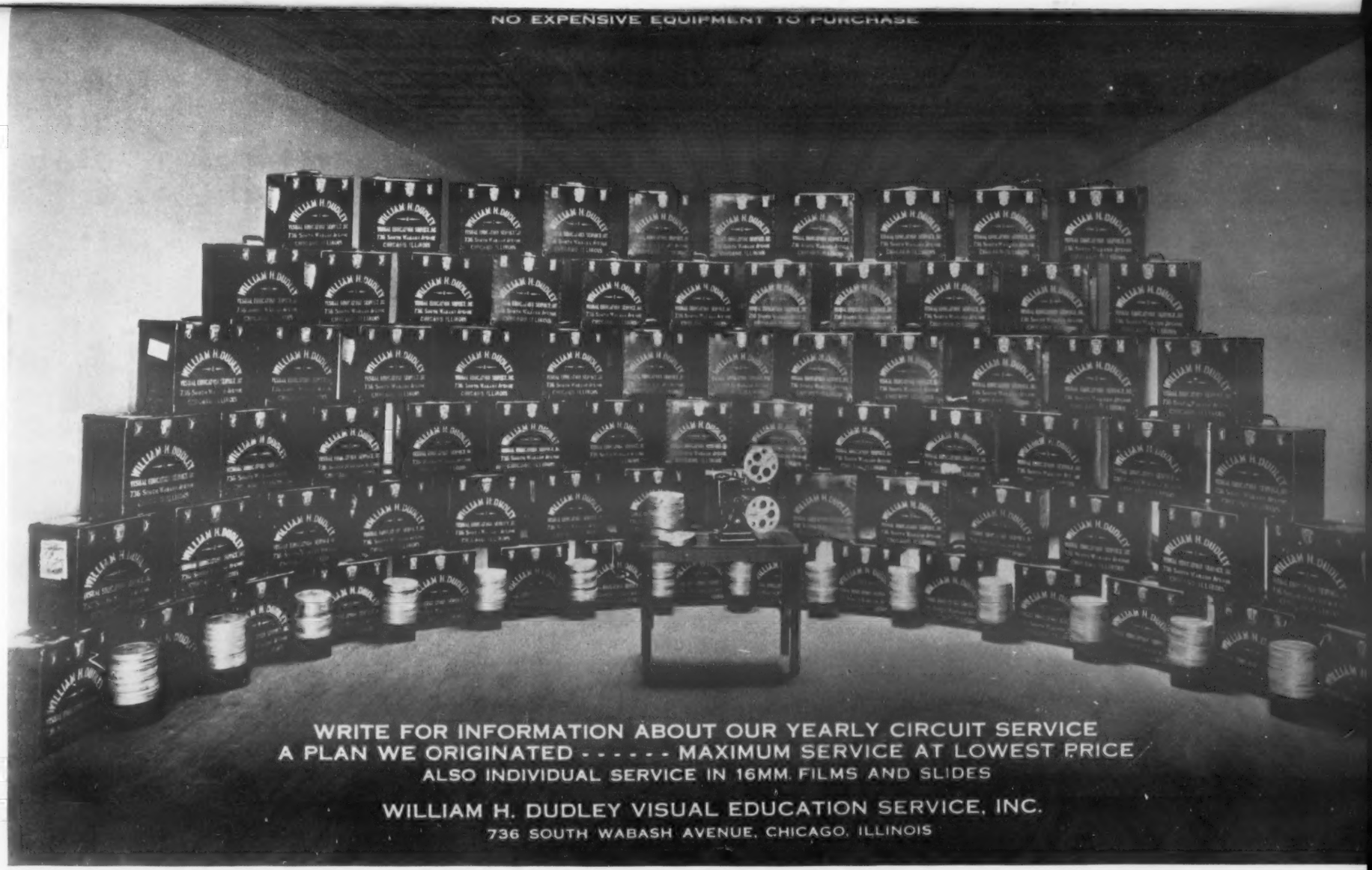
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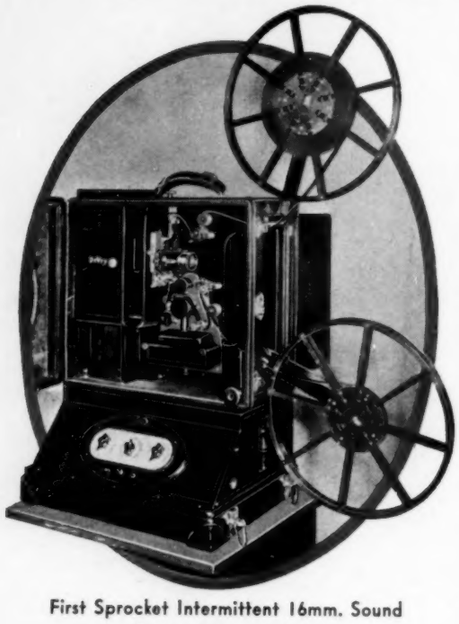

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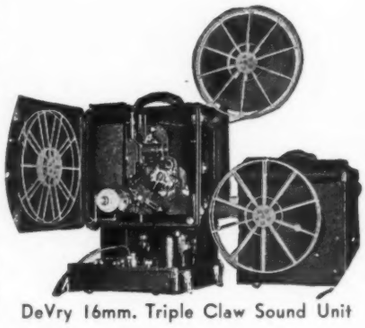

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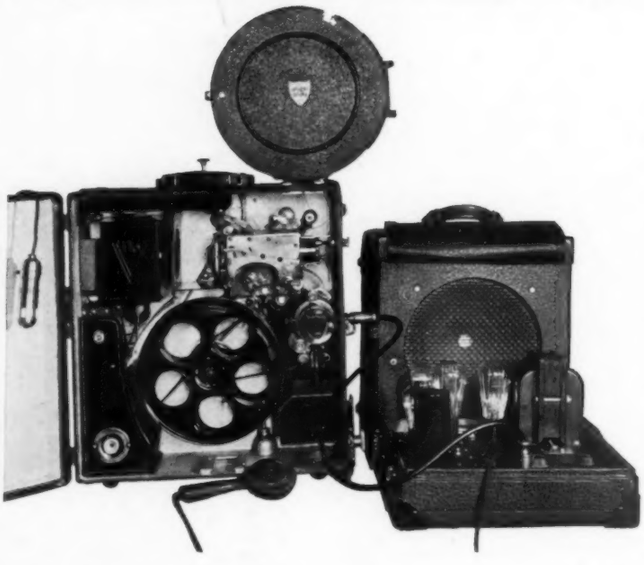

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Editorial

As stated in our September issue, this October number was planned to carry all the addresses delivered before the Department of Visual Instruction of the National Education Association meeting at Denver on July 1st and 2nd last, except those printed elsewhere. The issue would then serve somewhat as "Proceedings" for Department members.

We have done our best. Five of the twelve addresses listed on the Program appear here (see titles under Contents at the right.) They are printed in full, save for some supplementary material supplied to the audience at the time in mimeographed or printed sheets.

The remaining seven papers are accounted for as follows:

Two speakers were absent (H. L. Kooser and Merrill Bishop) and their papers were not read.

Two have already been printed (Inez C. Larson, in THE EDUCATIONAL SCREEN for June; and Glen Ream, in THE JOURNAL OF THE NATIONAL EDUCATION ASSOCIATION for September.)

One address—"Making the Rocky Mountains a Part of a School Program" by Superintendent Lloyd Shaw of Colorado Springs—consisted of extemporaneous remarks accompanying a motion picture of actual activities in the Cheyenne Mountain Schools. Reprinting the remarks, without the picture, could not do justice to the very interesting presentation.

Two are still to appear, we trust, in our November issue. "A Large Area Visual Instruction Service," by F. Wilcken Fox, Secretary of Extension Service, Brigham Young University (replacing Lowry Nelson on the program) requires accompanying cuts which could not be ready in time for October deadline. The other paper —"The Role of a Visual Aid and Sensory Technique Course in Teacher Preparation for the New Day," by Henry Klonower, Chief of Teacher Division of the State Department of Public Instruction in Pennsylvania—failed to reach us in time for October printing. We hope to be able to secure these before November deadline.

As this October issue may find increased demand, we are making a modest increase in the regular run. The reserve will not be large, however, and only the prompt orders can be filled.

Educational Screen
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OCTOBER, 1935

VOLUME XIV NUMBER 8

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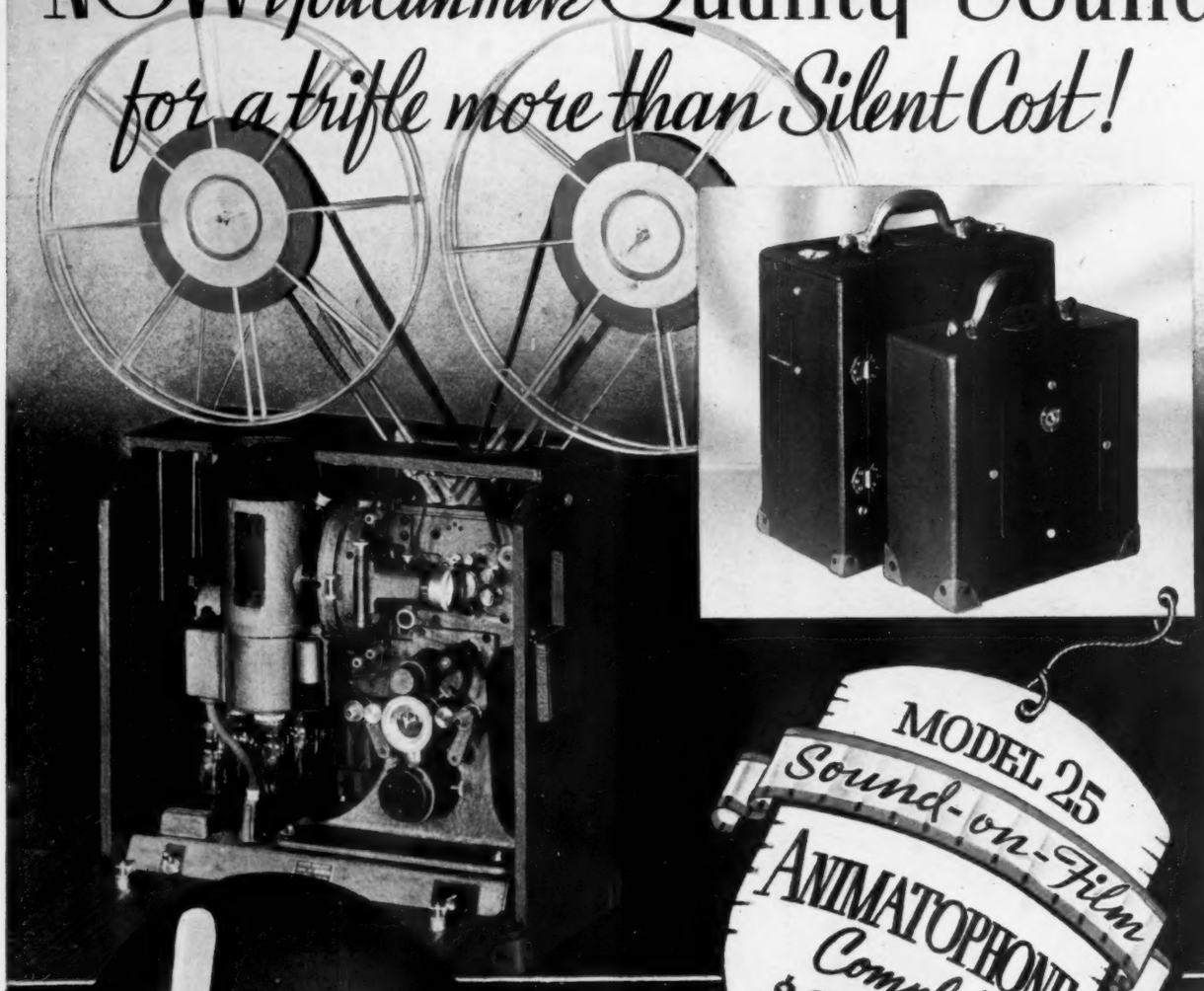

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Characteristics in Still Pictures for Instructional Use in the Classroom

By LELIA TROLINGER
Secretary Bureau of Visual Instruction,
University of Colorado, Boulder, Colorado

TRAINING teachers in the use of visual and other sensory aids is greatly needed in most sections of the United States. We can expect no great progress in this field until the teachers know why the aids are needed, have certain standards by which such aids are judged, and know something of the best methods — insofar as they have been determined—for the use of the aids.

The study under discussion today deals with the making of a scale against which teachers may check pictures for use in the classroom. Standards for judging pictures for educational purposes are very vague and yet pictures are probably more used in the daily routine of the classroom than any other visual-sensory aid except perhaps the blackboard.

By means of a questionnaire, opinions were gathered from state and city officials of visual instruction departments. Qualities or characteristics were classified into two groups, *Technical* and *Instructional*, and a distribution of points with a total of 100 was made according to the estimated value of each quality.

As many of you know, the subject of training teachers in the proper use of visual-sensory aids has been a hobby of mine for several years. Hence it is not surprising that when I begin to make a special study of anything in the field of visual instruction, it is very likely to emerge related to this topic of teachers training. I do not believe we shall ever achieve any worthwhile goals in this field until a large per cent of the teachers have had such training. Some states, notably Pennsylvania, have provided for this training very adequately but many states have relatively few teachers who really know how to use the visual aids that are put into their hands.

Although my own work in the Bureau of Visual Instruction at the University of Colorado has to do entirely with projected aids, I personally feel that aids such as field trips, pictures, posters, exhibits, and the like, should be used to a greater extent in the daily routine of the classroom than the projected aids. Yet many teachers when visual aids are mentioned think only of motion pictures, lantern slides, or filmstrips. Pictures—loose pictures, still pictures, flat pictures, whatever you choose to call them—are probably more generally used by the average teacher than any other single type of visual-sensory aid. If a check list has ever been made by a large group of teachers of all types of aids used over a given period, I have not seen it, but for my own satisfaction, I asked several teachers in an Extension Class to check the aids for one week and except for blackboard work, the pictures were greatly in the majority in that small group.

However, despite the fact that pictures are so universally used, very few teachers seem to have any definite standards by which the pictures are judged. I had noticed this repeatedly at the beginning of my classes in visual aids, and it was forcibly brought to my attention by a simple experiment at Teachers College, Columbia University. Dr. Edwin H. Reeder was giving a Unit Course in visual aids. One day he brought to class a large group of geographies. They were good modern books and he used a text of which he had enough copies for each member of the class. Each student was asked to select what seemed to him to be the best and the poorest pictures in the text, judged by the teaching values. Only a few minutes were given for the study of the pictures for the only purpose was to bring out the need of study of pictures that are to be used for teaching purposes. A list was made on the blackboard, one column of the numbers of the best illustrations and the other of the poorest. I do not recall what I considered the best picture, but I do recall very vividly my choice for the poorest, and as it happened, Dr. Reeder had listed the same one as his choice of the poorest. It was a street scene in Belgium, I believe, but it might just as well have been a street scene in New Zealand, Colorado, England or Canada. There was nothing in the picture which would in any sense be typical of the country—it was merely a scene in the business section of a city. Yet to my great surprise, two different teachers had listed that very picture as their first choice of a good teaching picture. I think at that very hour my decision to make a study of standards for pictures was reached. That was four years ago and I am now working on the problem.

My two-fold idea in this problem has been to make a scale against which teachers may check pictures that they wish to use; then, as a second and perhaps more important step, to actually carry on an experiment to see if this scale does help the teachers who use it. The first part is completed. The scale is ready to use and I shall give you the procedure that has been used in constructing it.

The second part has not yet been started.

The preliminary work, reading, consultation, writing and re-writing forms and questionnaires, took most of my spare time for a year or two before I had anything ready for actual work. Finally last fall (1934) I sent out a group of trial questionnaires to a number of persons whose writings in this phase of visual instruction had attracted my attention. These trial questionnaires received greater attention than I had hoped for, and they brought back to me some excellent suggestions, though not all of them could be incorporated in the final questionnaire.

Last December about seventy of the final forms were mailed out to the group who should constitute our experts in this field if such exists. The group was selected in a purely objective manner from the Visual Instruction Directory. The questionnaires were mailed to our national officers, all state officials as listed by the Directory, and to all city and county officials in cities of 200,000 or more, where one person was designated as director of visual instruction for whole city or county. Undoubtedly a number of experts were omitted by this procedure but it seemed a method which would include the greatest number in a purely unbiased manner. More than fifty per cent of the persons to whom the scale was sent responded.

In the questionnaire, I asked for a distribution of points for the different qualities or characteristics so that the total would equal 100. Almost unanimously, both in the trial and the final questionnaires, those reporting favored the division of the characteristics into *Technical* and *Instructional* quality. In the final reports, the division of 40-60 was almost as unanimously adopted. There was considerable variation in values assigned to individual characteristics. However, I have computed both the mean and the mode and they are very nearly the same.

Technical Quality—40 Points

A Picture Should Be:

	Mean	Mode
Artistic	11	10
Clear and Definite	11	10
Free From Blemishes	5	5
Of Practical Size	7	10
Properly Colored	6	5
Instructional Quality—60 Points		
Truthful	15	15
Authentic	8	10
Relevant	11	10
Significant	9	10
Stimulative	11	10
Suggestive of Size	6	5
	100	

At the present time unless someone yet can show sufficient reason for the change, I think the scale which is used in the experiment will be that using the mean as the measure of central tendency. However, frankly, I do not think it will make much difference for if the scale proves valuable at all, I believe that probably the greatest value will lie in the suggestive power rather than in its ability to allot numerical grades to pictures.

The second step will be a test of this scale and this, it seems to me, will be far more difficult than making the scale. Yet if in a fair and unbiased experiment, teachers do not show greater ability in evaluating pictures when the scale is used than they do when it is not used, we shall be forced to conclude that a scale, or at least this scale, is of little value. However, that is the problem that remains to be solved.

You may wonder how I plan to proceed now. I sometimes wonder myself what to do next. However, I do have the procedure fairly well worked out. Nearly all those who returned the questionnaires were kind enough to consent to cooperate with me in this latter part of the experiment. I have selected a unit of study, and am now trying to select twenty pictures, some of which are good, some fair, and some poor when considered from the standards set up by the scale. Of course a background of factual material will have to be provided for many of the teachers might not have the necessary information since the unit is somewhat regional. Then instructions will have to be carefully prepared. First I shall ask this group of experts who returned the questionnaires to grade the pictures with the scale. After a week or ten days those who have the facilities to do it, will be asked to let a few interested members of their classes grade the pictures without the scale. After another interval of time they will be given the scale and asked to regrade the pictures. Then we shall see if the latter grades more nearly approach the grades given by the experts than the former grades given without the scale did. Of course I shall be trying this out on all willing candidates around my own University. I believe I can get sufficient number to assist in this work to make the experiment reliable.

There are many interesting correlations which may develop. Will those teachers who have been teaching only a few years do as well as more experienced teachers? What will be the results of a comparison between grade, high school and junior high school teachers? Also there are many questions in my own mind right now as to the best methods of selecting the pictures, or will it make any special difference? Should I, in order to secure more uniformity, suggest for the first grading that 90-100 should indicate very superior figures, 80-89 good, 70-79 fair, 60-69 poor and below 60 very poor? I am planning to use twenty pictures. Is that enough for an experiment or is it more than necessary? I shall be very grateful for any

suggestions. It is and has been a very interesting study but what the results will be remains a question. If the scale proves to be valuable, I shall be very happy to have made, with the aid of all these experts, a small contribution to this field of education. When the study is completed, it will probably be published so that those interested may see the complete results of the experiment.

The Preparation and Presentation of a Science Night Program

By ROBERT COLLIER JR.
Chemistry Department, South High School, Denver, Colorado

DURING the past years of uncertainty our schools have been faced with many serious problems. One of the most severe has been criticism. Some has been merited, for progress is many times measured by a certain amount of constructive criticism. However, a great deal has been rather unfair and uncalled for. Arising from ignorance of actual conditions within the school and measured by education received in the little red school house of yesterday, many people have vented their opposition to rising taxes by attacking most unjustly the new education program of our schools. The press which should support any constructive effort for the betterment of our community has done little to combat the situation, although at times the papers do give space for many of the activities of our schools.

To overcome this criticism the schools have been forced by necessity to "sell themselves." To this end we have formed Parent Teacher organizations, issued bulletins, published school papers, and have done everything possible to direct favorable public attention toward our schools. With the idea of showing the patrons of our school some of the outstanding ways in which our boys and girls are receiving modern instruction, many meetings have been held. In these meetings only small groups of students have been able to appear, few patrons, chiefly parents, have attended, and those from whom criticism has been most severe have been noticeably absent. Thus, results have not been as fruitful as they might have been had we been able to secure the attendance of those who have been active in opposition of our schools.

With the idea then of definitely selling our schools to our patrons and more especially to our city, South High School of Denver has organized two "Science nights" in which we have definitely endeavored to encourage as many pupils as possible to participate in a display of student academic activities, not necessarily confined to science alone, and which might challenge every student in our school to show for the benefit of their classmates, parents and interested visitors some of the things which they have learned in the classroom. To do this requires a vast amount of co-operation from every faculty member and student in school. These "science nights" have attracted state wide attention. By actual count our last science night brought over 5,000 people to our building. Some of these came from Greeley, Fort Morgan, Golden, and Colorado Springs.

Organization

The organization of such a meeting with its large interested crowds must be made months in advance. Our last Science night, which was held in November, was in preparation in some departments for a year and a half. Many of our finest student exhibits were displayed by present members of the various departments who had to be trained anew.

In preparation for the evening every department in our school was asked to display some interesting project, for there is no department in the modern school which cannot lend itself to such an undertaking. Of course, the usual objections were offered from many departments who felt that they could show nothing of special interest to people outside of the school. It required considerable work to sell the idea to some department heads, but with the co-operation of our principal who felt that such an effort was worth while, we were able to secure active support from various departments.

Publicity

The Art Departments commenced work by making a series of interesting posters which were distributed to other schools as well as throughout business establishments of our own school area. These posters were well done in attractive colors and aroused considerable interest. They also furnished students an excellent outlet for their talent along artistic lines. The mechanical drawing boys made splendid signs for all exhibits and gave invaluable assistance in making large banners for the various departments. Over 600 pieces of lettering were made during the preparations for the exhibit. Our news writing classes were called in to supply feature articles for the city papers, and the various lo-

cal and neighborhood papers. They interviewed the students and teachers of the different departents, prepared material, and finally had the pleasure of seeing their own articles appear in print. These articles naturally inspired requests for photographs by the city papers. These were procured, and appearing there gave us state-wide publicity. Our papers have always been very generous of space for events of this sort. They realize that the project is not a commercial one and that it is interesting to the general public.

Traffic Control

The next serious problem that was attempted was the definite routing of our visitors through the building. The Safety Council, Traffic Squad, and the Pep Clubs of our school were called in. These individuals in their distinctive jackets and costumes were to act as guides to direct traffic, prevent congestion, answer questions, run errands, and help keep order. Through their co-operation a definite sequence of exhibits was planned so that visitors would be conducted to all parts of the school and miss none of the displays. Several important principles were developed, chief of which was to be sure that no exhibit would be placed in rooms which had only one entrance, further we had to be sure that in no place could the line of traffic intersect or cross. This was beautiful in theory but when the crowd arrived it became so difficult to handle that we finally were forced to open all entrances and allow the people to go where they desired, thus many people missed displays in which they were especially interested. This could not be avoided.

If a third Science night is attempted a definite control of the visitors will be attempted by means of tickets which may be secured on application. We also believe that grade school children will have to have a special display in order to keep them away from the crowds of the evening performancce. We likewise found it essential to have some officers from the city Police force whose presence has a salutory effect on some of the younger people in keeping them orderly. On arrival our guests were greeted by the Commercial Department who gave mimeographed directions as to where the exhibits could be found and when special features planned for special times of the evening occur. These were mimeographed by the students as the students arrived. In this way a partial check was obtained as to the number of visitors attending. A more definite check was obtained by using the commercial arithmetic classes, who were stationed at the doors to count all entering visitors thus determining the actual number attending.

Educational Value

The motivating idea in back of the exhibits of the various departments was to get as many students as possible to show material with which they were familiar, to as many as their own classmates, parents, relatives, and friends as possible. Such training is extremely valuable from several points of view. It develops confidence in his ability, increases the desire for a complete understanding of the project and gives the student a feeling of importance in the eyes of his classmates and friends that is hard to measure.

One young lady demonstrating the testing of milk for butterfat, was questioned by one of our visitors concerning the bacteria count of milk, the casin content, the amount of milk sugar, and many other facts with which she was unfamiliar. When she failed to give him all the answers to the questions he had asked, he told her the exact answers to the same questions. As he turned away she turned to a teacher standing nearby and asked in great disgust why that crazy man asked all those questions when he already knew the answers. It turned out that the individual in question was the director in charge of the United States Pure Food and Drug Administration Department in our city, who was questioning these pupils on their training along his line. In a later discussion he remarked how well the boys and girls of today were being trained to appreciate various foods and the value of pure food.

Departments

The chief departments co-operating were the Art, Biology, Astronomy, Mathematics, Physics, Psychology, Chemistry, Latin, Library, Home Economics News-writing, and several extra-curricular groups of the school. The exhibits were arranged throughout the school with as wide a separation as possible. The one serious mistake made in the display was the attempt to crowd the marvelous exhibit on "Consumer Education" into a small room where adequate examination space was not available.

In the Biology Department many microscopic displays in charge of students were arranged. Interesting pets ranging from a Honey Bear, Monkey, and Alligators to White Rats were borrowed from various sources throughout the city. The display of Riker Mounts containing many flowers, leaves, and dry specimens created some attention.

The Mathematics Department displayed demonstrations on the slide rule, classes in rapid calculation, figures involving the use of Pantagraphs and manipulation of Napiers rods. A display of various transits and surveying instruments all helped some of our budding engineers explain why mathematics is the foundation of modern industry.

The Astronomy Department had just completed a very nice Reflecting Telescope, the only one of its

kind in the city, and this with three other large telescopes were in constant demand the entire evening by our friends who were looking at the moon, Saturn and Mars. Also an exhibit of sky charts, models of the solar system and charts showing the explanation of the moon's phases were on display.

The Psychology Department had probably the most unusual exhibit of the entire display. Various illusions, a demonstration of mind reading, charts illustrative of superstitions, and an explanation of habit formation with models and specimens of the ear and brain were there to be explained to our visitors interested in the working of the mind. This department at first could not understand how it could find any material.

One exhibit, the psychology of a necktie, caused more comment than any one single exhibit.

The Physics Department naturally was in a position to display as much or more than any other department. The showing of Black Light, Neon tubes, automatic telephones and switch boards, the modern air conditioning of rooms, the relative cost of operation of various size light globes as determined by electric meters and sixty-seven other displays furnished sufficient information for those interested to enable them to spend an entire evening in this department alone. Displays in this field are limited only by the number and interest of the pupils participating and by the material available.

The Library with a splendid display of books, charts and reference materials contributed to every department.

The Chemistry Department displayed 156 exhibits ranging from chemistry involved in tooth powders and cosmetics to a continuous demonstration of the effects of liquid air. This substance with a temperature of -197 degrees Centigrade was a striking contrast to a working display on the same table of the Goldschmidt Process developing a temperature sufficient to melt steel at about 1500 degrees Centigrade. One feature found considerable favor. Something over sixty gallons of lemonade made from Citric acid and saccharine, colored with Anilene dye were consumed by the curious crowd who seemed to feel that anything free to eat might be of value regardless of where it came from. The display of pottery and clay material from our own Colorado Coor's Porcelain Plant was very much admired. Few Coloradoans realize the beauty and artistry of these articles from clay or the annual value to our State of these products. One of the greatest Chemical Industries in Colorado, the manufacture of beet sugar, was demonstrated from beet to sugar. Actual sugar made in the laboratory was on exhibition. It would require too much time to discuss all the material shown by the Chemistry Departments. Here again exhibits were limited by student participation rather than lack of possibilities.

Another exhibit which attracted attention was that furnished by the boys and girls of the Home Economics Department on "Consumer Education." Studies were made of the value of such material as canned tomatoes. Cans of tomatoes were purchased, opened and amounts of pulp and juice were carefully measured thus giving a definite comparison as to actual food value and cost. The value of various breakfast foods, packages showing slack fills and mislabeling were all shown. Samples of foods containing high and low food values and comparative cost were displayed. A splendid demonstration on Vitamins and the effects of their absence in diet showed the importance of a proper knowledge of these dietary factors. Girls displayed samples of silk hose and compared their values with original cost. The effect of various soaps on textiles as well as methods for removing stains from these textiles was most strikingly shown. The value of various commercial furs as normally sold on the market compared to the original raw fur and the wearing qualities of each was in charge of another group of girls. The actual value of linens, sheets and pillow cases as sold showing the effect of filling of starch and other chemicals thus making the finished product appear much better than it really was, had the effect of causing these future citizens to think twice before they purchased an article. The work of these classes in training our boys and girls to investigate articles before they are purchased rather than after is unusual. The training in proper buying is one of the biggest features of these home training classes. This matter of "Consumer Education" has been largely neglected up to this time in our school, and it is finding a ready audience in these days of the falling value of the dollar. No longer do boys and girls from these classes buy articles because of fancy wrappings or because of some misleading radio announcement. Such training is very much appreciated by their parents. Of course, extreme care is taken to avoid advertising materials in classes and an effort is made to lead the student to form independent constructive opinions of purchase values.

The Latin Department so often considered out of date in these days displayed a series of delightful miniatures of old war implements, bridges, Roman furniture, and a chart showing how Latin forms a basis for many of our scientific words.

Special Exhibits

Besides these exhibits we had four more or less recreational displays all in charge of our students. Our school musical organization played a concert for about an hour and half in the auditorium for those whose feet grew tired and wished to relax to the music of our splendid seventy-five piece band. Its happy music echoing through the halls added a

festive note to our evening. Before and after the band concert, continuous motion pictures were shown in the auditorium. This year we used the film the "Eyes of Science," which shows the manufacture and use of various optical instruments.

In the Gymnasium, one of our teachers who is an expert in High Tension Electricity assisted by some of his students produced a display of interesting phenomena made possible by various induction coils, Neon tubes, and electrical gadgets known more particularly to scientists.

We were fortunate to secure from the Denver Fire Clay Company their expert glass blower. Glass blowing always attracts and we had a crowd of five hundred watching this exhibit for almost the entire evening. The use of the Oxygen flame and the making of small articles from glass by a skilled glass blower fascinated especially the younger boys and girls.

Speakers are many times available for such occasions. We rather feel that in such an undertaking our patrons would rather spend their time with the examination of exhibits rather than sitting through a lecture, no matter how interesting.

Hobby Show

Another feature of our display was a hobby show in which any student who had a hobby was invited to participate. Many of our boys and girls are quite talented along lines which are foreign to their usual school work and which are almost unknown. So we had exhibits of poetry, stamps, outing equipment, Indian Craft, collections of Indian arrow heads, butterflies, and aeroplanes. An interesting display was furnished by the military groups—targets, machine guns and various army equipment.

Many other departments in the high school lend themselves readily to such an evening. Classes in stagecraft, auto shop, machine shop, music, history, English, French, Spanish, physical education, in fact there is not a single department in the school which can not find expression on such a night.

Our visitors were much impressed by the large number of displays as well as the aptitude displayed by the students in charge. If our Science night accomplished nothing more it gave recognition to many boys and girls and an opportunity to show what they were interested in. Therefore we believe that such an evening is decidedly worth while.

It rquires organization, co-operation, and a whole lot of hard work. It has a definite educational value for the participants and it also has the value of "selling our School" to the taxpayers who after all determine the policies of the school. With proper co-operation and determination any school can do likewise.

Adaptation of Art to the Classroom

By EDNA HELLSTERN
Central Grade School, Pueblo, Colorado

PUBLIC school methods have changed rapidly during the past few years but public attitude toward newer methods remains more or less static. We are frequently encountering parents who are not in sympathy with and, not infrequently, are opposed to change in method. While they submit, you feel instinctively they are not convinced that the way we teach is superior to methods used when they went to school. You often hear the remark, "Now, when I went to school we did it this way!"

No subject in the modern curriculum has been harder to establish in public approval than "art education". The idea still lingers that the schools are trying to produce a few artists at the expense of the taxpayers and the time of all the other children. You cannot explain to a father that the inward joy he feels when the garden he planted begins to show green, is the same ecstasy we want his son to experience when he builds a model Viking boat in the art room. The mother who puts a perfect coat of icing on her cake for the Ladies' Aid experiences the same emotion that the daughter experiences as she completes the finishing touches on her costume for the school pageant. The same parent, no doubt, will tell you, "There's no use in my child taking art. I don't think he'll ever learn to draw. I never could."

Mention the word "art" to most people and they immediately call to mind "art galleries". To them an appreciation of art means a collection of pictures. The richer one is the more numerous and the more expensive are the original paintings he collects. The poor satisfy the same impulse by buying prints made from the originals the rich have collected. This is one of our European inheritances that we have failed to outgrow. "Art for art's sake" is the motto of the general public if they have any interest in art at all.

The ideal for art in the public school has deviated a long way from "art for art's sake". Art education stresses the sheer joy of creation and appreciation as an educational end. The art class aims to put into the hands of every child a tool for self-expression. It gives him a new vocabulary. Art is

taking its place with other subjects in the curriculum through systematic courses of study. It is no longer a subject for a Friday afternoon's amusement period when children haphazardly copy the teacher's ideas on paper while the teacher herself clears her desk in order to leave early. New courses of study for art are logical and systematic, built up step by step as orderly as a course of study in arithmetic or any other basic subject. They are built upon the idea that any child can learn to draw and to appreciate his surroundings as surely as he can learn to read, write, or do a sum. You cannot expect him to express himself graphically without a step-by-step background any more than you can expect him to write a composition without having mastered the mechanics of writing.

It is up to the classroom teacher to permit the child to use the vocabulary for self-expression that the art teacher is trying to put into his hands. It is, indeed, the classroom teacher who must help him find the ideas he wishes to express, whether it is the nature study lesson, the geography lesson, or the history lesson. Such ideas lose their spontaneity if they must be referred to the art class. It is here the teacher may guide the child's leisure time. Teachers have long since recognized the fact that not all children can express themselves orally. How often have you said of a child, "He doesn't do good oral work but he hands in excellent examination papers." Then why not give him credit if he can describe graphically what he cannot tell? The eye retains what the ear soon forgets. In a nature study class a little foreign boy could draw for the others the tracks of any wild animal living near the river. His recitation was far more dramatic than any oral description he could possibly have given.

A sixth grade history class were studying medieval castles. Several, on their own initiative, went home and constructed castles from paper cartons and colored paper. Another group asked to bring up clay from the river bed in order to construct a model of the Parthenon. A fifth showed their knowledge of interiors when they built at home models of Pioneer kitchens. These children were building historical backgrounds more poignant than any the teacher could build up by mere words. The teacher may find a piece of chalk more dramatic than words. "Draw and the child draws with you. Talk and you talk alone," as Henry Turner Bailey put it.

You cannot teach a child to love beauty unless he is surrounded by beauty. You cannot put over to the child the beauty of the Grand Canyon or the exquisiteness of the Taj Mahal in a room of four barren walls. No fine idea can come from a child who spends his day staring at blank walls. No matter how new the school, how fine the architecture, the school room is still barren until the teacher fills it with personal touches. Every teacher must be "art conscious" if the art department is to function in the school curriculum. I have spent considerable time and expense in decorating my classrooms. In the art room I have concentrated on Indian art. Besides three large colored paintings of Indian life by Robert Westley Anieck and numerous smaller ones, some by Indian artists, I have quite a collection of such samples of Indian life as katcinas, jugs, water jars, a tom-tom, strings of Indian corn.

While I had seldom discussed the objects in the room, I wondered how much impression they had made on the children. I met each of my fourth, fifth, and sixth grade art classes in their own room. I asked them to make a list of the things in the art room that impressed them and to tell me the thing they liked best in the room. I was much surprised to find out from this questionnaire that, first, no object missed their attention. They are as sensitive to their surroundings as wild animals. Secondly, I found out that while a few preferred the pictures, most of them like the katcinas, bowls, Indian corn, tom-tom and some even liked the cactus garden best. No exhibit of art of the Southwest would be complete without a cactus exhibit. Thinking over my grade school life, I recall such objects as vases, bowls, baskets and where they were placed in the room, while I have no recollection of pictures on the walls although I know there were many. I tried the same questionnaire on each child for his home room. I found the same facts to be true. They miss nothing about their surroundings. Exhibits that are left up for a short time make a greater impression than objects that are in front of them throughout the year.

From the results of the questionnaire I drew two conclusions. Exhibits should have a definite purpose and should not be left out for too long a time. Then, all investments in art need not be in pictures. In my sixth grade where European geography and history are studied, we are investing our money in samples of peasant art. We have already samples of Czecho-Slovakian pottery and two beautiful Polish batik wooden bowls, and we expect to add more next year.

Not all investments in art need be expensive. "Home-made" devices sometimes add the most cheer to the room. Dark, unsightly parts of the rooms should be attacked first. Attractive bulletin boards and border spaces should be carefully planned and changed often. Teachers who teach in old buildings are more fortunate than those who teach in new ones for a thumb tack here and there will not do much harm. Our building is old. The ceilings are high. At the top of the high windows are

transoms for ventilation. These transoms have always been a handicap. The light is bad and they are unsightly in appearance. We have made transparencies from oak-tag and show card paint, oiling them with any kind of oil from rancid olive oil to pure linseed oil. The subjects chosen for illustrating fit into the subject matter taught in the room. The transoms in the sixth grade depict European travel; fourth grade, Colorado mountains, etc.

Few of us understand the emotional effect of color. If we could analyze the stimulating effect of the sunset across the lake, or the calm restful repose of the light through the chapel window, and could simulate them in our classroom, whether in kindergarten or high school, some of our problems would be over.

Noon Movies---the New Educational Tool

By L. K. MEOLA
Chairman Visual Education,
John Hay High School, Cleveland, Ohio

A FRIEND recently defined the words optimist and pessimist in such a way, that I have continually wondered which definition applies to me. My friend defined an optimist as "a man who saw light when there was none," and the pessimist as "the fellow who puts out the light." Now, to have noon movies discussed as "the new educational tool" at the Visual Instruction meeting may require either a great deal of optimism or profound pessimism. As our national humorist, Will Rogers, says "all I know is what I read in the papers"; so must I say that all I know about noon movies is what is done at John Hay High School, Cleveland, Ohio.

Whenever I speak of noon movies, here, may it be understood that I mean, motion picture films shown daily in the school auditorium during the luncheon periods for recreational as well as educational purposes.

The noon movies have become a definite part of our curriculum (1) because they provide the easiest and cheapest solution to administrative and housing problems during luncheon periods, (2) because they are a decided economic benefit to the Board of Education as well as source of income to the school treasury, and (3) because they are becoming a very worthy educational tool for the direct and indirect teaching of social, political, and economic problems. Situations are continually presenting themselves in classrooms to which the motion pictures shown in the noon movies offer a direct and satisfactory approach.

The advantages of noon movies were twofold when they solved the administrative and housing problems during the luncheon periods because, they did away with the costly and difficult job of supervising study halls, and because they provided students with a place where they might give outlet to pent-up energies (a sort of school safety valve), and where a short period of relaxation and desirable recreation might be found before the classroom work is resumed. The twenty-five minute study halls often held in the auditorium were not a pleasant assignment to the student nor to the teacher. These twenty-five minutes were considered by the students a mild form of torture; to the teacher it meant a hectic fifty minute assignment. The reasons these study halls were not conducive to concentrated study are (1) the uneasiness of the student, (2) the unsuitableness of the room for ideal study purposes, (3) the size of the group, (4) the amount of clerical work necessary to seat the large group properly and check attendance, and (5) the mental attitude of every one toward these study halls. These conditions which operate against the successful conduct of lunch period study halls have all been abolished by properly selected motion pictures. The stern faces of the teachers have assumed a cheerful expression and meantime thousands of dollars which were necessary for the teacher supervision of huge study halls are saved for the Board of Education. This set-up has also made simpler for the administrator the making of the master program because more teachers are available for classroom teaching during the lunch periods.

We have six luncheon periods in our school day, each twenty-five minutes long. Each luncheon group is given an alphabetical group name from A to F. At the beginning of the semester students arrange their programs, everyone setting aside one of these periods for lunch. In order that the division of groups may be well balanced, the number enrolled in each period is counted, necessary adjustments and assignments made to definite luncheon groups. To prevent pupils crowding into other groups, each student is provided with an identification card that must be presented upon request at any time during the semester in the lunchroom. When Group A is at lunch, Group B is in the noon movies. Groups C and D, and groups E and F are

similarly paired. Students not wishing to go to the auditorium movies have provided for them vacant classrooms where they may go. We call these rooms recreation rooms. At the end of the twenty-five minute period the groups alternate. Under no circumstances are students permitted to leave the building to roam the streets or go to outside restaurants. This rule is enforced not only for administrative reasons, but because the school is provided with an excellent cafeteria and lunchroom operated by the Board of Education on a non-profit basis.

In the noon movies, students see two reels of film per day or ten reels per week. When a feature picture does not require the entire week for showing, the balance of the week is filled in with short subjects such as newsreels, travel talks, cartoons, comedies and featurettes. The charge made for daily attendance is one cent per reel or ten cents per week. From these factors it is evident that the housing facilities of the school are used to the best advantage, the administrative problems minimized, and the students and teachers supplied with a choice of lunch-hour activity. The economic advantages of the noon movies for the Board of Education, are the savings in salaries necessary to employ three or more very strong teachers to do police work in study halls whose enrollment many times pass the thousand mark every fifty minutes.

The noon movies have proved themselves the only reliable source of income in our school especially because 80% of the students of John Hay High School are girls who have slight interest in the athletic events which provide income for many schools. Funds derived from this source go to many very worthwhile school activities. It would be practically impossible to carry on an extensive visual education program were it not for the noon movies. These funds made possible the purchase of a Western Electric sound equipment in the auditorium, a two channel public address system with a loud speaker in every classroom and office, and microphone outlets in six vital places in the building—all necessary machinery to carry on the visual education program — as well as helping to finance sending school teams in Stenography, Typewriting, and Bookkeeping to state and national contests. In fact, our school's activities would have suffered tremendously were it not for the funds derived from the noon movies.

Perhaps you are wondering what pictures are available for school showings. All films produced by the leading motion picture producers are available to schools provided they comply with certain very lenient regulations. The film programs are rented weekly and the average cost is $3.00 per reel. My selection of the school's films is made by taking the film ratings given by the *Educational Screen, Parents Magazine, Motion Picture Herald,* the *Showman,* and the advice furnished by the film distributor. In addition I try to see as many of the films that are recommended as I can, or accept the recommendation of the students and faculty.

Originally noon movies were considered only as recreational films that filled a need arising from administration and housing problems. Doubtless this condition still exists in many schools where noon movies are shown. In John Hay, however, attempts are made whenever and wherever possible to tie the noon movie directly or indirectly with the curriculum studies. A list of the films shown during the past year is evidence of the adaptability of many of the films to class work. May I point out a few of the outstanding ones that were shown this year. They are: *The Conquerors, David Harum, Carolina, Barretts of Wimpole Street, Christopher Bean, Tugboat Annie, Oliver Twist, Operator Thirteen, House of Rothschild, Little Women.*

As you can see, these films are among the finest productions of the year 1935. There are also many other fine films that would have been suitable in part for school use, among them *Queen Christina, Rasputin and the Empress, Viva Villa, Thunder Over Mexico, Eskimo,* and others, but those, though they might appear suitable by their title, after previewing them, were questioned because they contained scenes that were too gruesome or risque for showing to high school students.

If you will notice, my program includes some features that are very light, musical, and recreational. I feel this is necessary in order to make up a well balanced program, and to offer the school a choice of desirable entertainment from which the group will get relaxation as well as mental stimulation.

Application of the noon movies to classroom work is done directly and indirectly. The direct application of the noon movies is in the six weeks course in motion picture appreciation offered as part of the 11A English course. The text used in this course is *How to Appreciate Motion Pictures* by Dr. Edgar Dale of Ohio State University, a book many of you know. The 11A English teachers work very closely with me during this six week period because the noon movie feature forms the laboratory for the course in movie appreciation. This makes an ideal preparatory set-up because the entire group may see the same film at the same time. The fact that only two reels are shown each day helps in a great measure. Only a part of the film is studied at the time and opportunity for thought, review, and more detailed preparation is presented. Another great advantage when the school feature is used lies in the fact that the entire group may look for a definite thing that makes

possible a unified objective. This is especially true when the teacher has worked up in advance major and minor objectives and concrete lesson plans. The six weeks also present a very splendid opportunity to rate the features shown in the noon movies from poor to excellent with reasons for the ratings. The results lead to an ideal situation to stimulate students into a clearer understanding of those desirable things that may be discovered in a good film and to awaken in them a consciousness of motion picture appreciation. Along with this is the fact that the students in the class make recommendations of films that they see in the theaters which will be suitable for school use later in the year.

The indirect tie up with the curriculum comes in the application of the film contents in the fields of Natural Science, Social Science, Dramatics, Oral English, Art, Home Economics, Music, and the skill subjects. Many films may be cited as illustrations of these applications. However, as time does allow their analysis, may I be permitted to deal in part with what we have found in John Hay regarding *House of Rothschild* and the *Barretts of Wimpole Street*.

The House with the Red Shield made very clear to the English classes studying the Idylls of the King, the true meaning of the words "family shield". The film presented it so ideally and realistically that even the slowest student readily understood the term. When this feature was to be shown, the social science teachers were informed and plans were laid to apply the filmed material whenever possible. In the Economics and Business Training classes international financing, international banking, and the stock exchange became a term of common interest. They saw from this feature why large banking houses maintain offices in the leading capitals of Europe. The scene where bids were made to restore France to economic security showed very clearly and definitely the inner machinery necessary for such a loan. In addition, it showed the intrigue and jealousy with which these loans are granted. The stock market scene, where Nathan Rothschild single handed was compelled to support the London stock market when the speculators became panicky and dumped their allied securities, showed how sensitive the stock market is to political crises. Then, too, it showed how fortunes were lost and made. In this connection our teachers were able to show how our present stock markets react to favorable or unfavorable legislation both at home and abroad.

Fortunately for the world history groups, this production was brought in when they were completing a study of the Napoleonic wars. The film made their work so much more impressive and meaningful, that many excellent references and outside reports were made in class. Especially were the students interested in the biography of the Duke of Wellington. He actually became a living being whereas before that time Napoleon had been the only high light of the period.

The tax collector scene made realistic the reason why tax collectors were disliked from the days of early Rome. The matter of religious oppression and the meaning of religious toleration were also clarified. The students could readily understand the reason for religious wars.

The wonderful court scene done so aptly in Technicolor revealed to these students how richly decorative the court costumes of the period were and the sumptuousness of St. James Palace. This same scene was of the utmost importance to the Home Economics group and the Art group. The Physics students were particularly interested in how Technicolor photography is done, and special reports were made on it.

And what a master George Arliss proved to be to the Dramatic and Oral English students! He exemplified in a way few can ever equal, every possible mannerism and mood to express the emotions. Each day the entire group would study the every move of the actors. When they would convene in class, all of the emotions of the cast were reiterated and stressed. The cast of the production was their pattern, the noon movies their laboratory and the class the place to prove how well they had mastered their lesson. In Oral English, many a student realized how the classroom instruction fits into movies. It made him realize that perfect diction, poise, well selected words, and meaningful speech are essential qualifications to success in life.

When the *Barretts of Wimpole Street* film was shown, I arranged with the head of the English Department to connect the film with the English classes whenever possible. Special assignments of Browning's poems were made. Pupils were asked to read the biography of Browning and make reports in class. Every possible connection between the works of Browning and the picturization of his love for Elizabeth Barrett became a prime interest to the student. The library was flooded with demands for Besier's play, "Barretts of Wimpole Street." Attempt to read and understand the poem Sordello which Robert Browning calls a "horror of great darkness" were made by the pupils in spite of Browning's reply to Elizabeth Barrett in Besier's play "When that passage was written only God and Robert Browning understood it. Now only God understands it."

The Oral English and Dramatic classes found a wealth of material in the expression of the emotions as presented by Charles Laughton, Norma Shearer, Maureen O'Sullivan, and others. We see

here portrayed every possible emotion, the fear of the children who were robbed of their freedom by the jealousy of the father, the joys of the family when the father is away, the mannerisms of the impetuous Browning, the spirit of revolt in Henrietta and Elizabeth, hysteria as portrayed by Arabel at the news of Elizabeth's departure, the stuttering of the brother in the father's presence and the expressions of domination by the father. For weeks the Dramatic classes kept utilizing the wealth of materials found in this film. In Home Economics, the costumes and furniture of this period proved most interesting. Here were splendid examples of mid-Victorian lighting fixtures, Chippendale chairs, tea sets, a quilted sofa, and heavy window drapes.

From the analysis of these films it is very evident that their showing two reels per day, as we do in the noon movies, affords the students an opportunity to analyze and digest the depth of production and to appreciate the enormity of research, the perfection of detail and the immensity of study necessary to make a great picture play. It seems a great misfortune that opportunities like these cannot be made available to every school system when one considers the millions of dollars spent yearly to produce these pictures which portray, in many cases, true life situations and authentic manners and customs of the time, in such a way that the student may easily understand them. It seems that it is the duty of us school teachers to use all those excellent pictures that are available, and then use our influence to impress upon the motion picture producers, the need for more of the better type films.

And finally what social values do these films have? Dr. Edgar Dale in his book *How to Appreciate Motion Pictures*, describes social values very excellently. Were you to step into our auditorium during a luncheon period, you would marvel at the astounding effect the picture is having on the student. First of all, interest lies entirely in the picture; no teacher supervision is necessary. Why should there be? Notice how every mood and emotion expressed by the actors are being lived by the group. Everyone seems to have eyes for the screen alone and ears for the voice of the actors; everyone is swayed this way and that by the characters. The children are living the experiences portrayed by the film. When the two reels end, then comes the speculation, the guess at the answer to the problem at hand or the solution of the situation presented. Isn't it wonderful to have the student come face to face with life's problems and seek a desirable solution?

An excellent film finds the desirable solutions through the use of desirable traits. To the student is presented the consciousness that only through good and righteous living can happiness and success be achieved. He gets a sense of a fair play and justice. He realizes the pit-falls of life. Maybe some of these life situations fit into his life; here is his problem. Maybe the jealous and paternal love expressed in the *Barretts of Wimpole Street* contrasted with the close family tie shown in the *House of Rothschild* changed the students' attitude toward their family, friends, and even teachers. I wonder many times how far the noon movies go toward affecting the habits and attitudes of the children. In John Hay every class teacher is urged to rate his class students for habits and attitudes commendable or to be developed. The scale employed is known as "Habits and Attitudes Desirable for Social and Vocational Acceptability." How far or how much the films affect the student for this rating I don't know, but it seems that living the good protrayed by the film, facing life experiences, some of them comparable with classroom situations, must have some effect on their attitude toward the classroom.

Dr. Thomas Briggs of Columbia expresses his philosophy of Education as the "ability to teach people to do those desirable things they are going to do anyway." Our noon movies, by careful selection, surely tend toward teaching the students to desire worthwhile motion pictures. If our noon movies can build up in them a standard of judging desirable films, a taste for the good by showing them good, then, on the whole, our young people form their own standards of good taste. What they need most is film guidance and the noon movies give rightful guidance.

And finally, I see in a good film a true picture of what Mr. Charles H. Lake, superintendent of Cleveland Schools, meant when he said to the extension high school senior class: "Success in life depends on the development of three things, courage, unselfishness, and good taste." An embodiment of these character traits is found in any good film.

In conclusion, when one considers the wealth of materials in classical and historical films, and when one realizes the carefulness of research and cost of production, it seems unfortunate that these films so worthwhile as teaching tools do not find through the media of the noon movies a more definite place in the curriculum of more schools.

Dr. Walter Dill Scott Sees Greater Use of Sound Films, Other Devices, in Future

Speaking of the University of the future, Dr. Walter Dill Scott, President of Northwestern University, recently stated that, "The direct cost of instruction per student will be greatly decreased. It has already been demonstrated that a professor may lecture to 500 students as effectively as to 50."

Systematic Visual Education in the Average School

By WILLIAM H. DUDLEY
Visual Education Service, Chicago, Illinois

FOR thirty years, interest in visual education has been growing in this country and throughout the civilized world. In spots, much has been accomplished; but when we contemplate the enormous field of education, and realize,—according to the report submitted at the Rome conference a year ago,—that fewer than ten per cent of the schools in America are doing anything in the employment of present day illustrative devices and equipment as an aid to better teaching, we must be convinced that the average teacher is still in the dark so far as visual aids are concerned; that, no matter how much of idle seeing they may do, in the words of Emerson, "the step from the knowing to the doing is all too rarely taken." Indeed, the vast majority is still content with the east wind of authority,—the authority of the teacher, the authority of the textbook. In the realm of visual education there are many things all teachers could do and many aids they could employ; aids involving no financial cost or hindrance; but of these I shall not attempt to speak, preferring in the few minutes at my disposal to restrict my discussion to the least attainable of all visual aids, the educational motion picture, and viewing the possibility of bringing it, in a constant and systematic way, into the *average* schoolroom as a help to better teaching.

There are two factors which explain why the motion picture, in spite of the universal recognition of its most vitalizing contribution to education, has actually come to be used in comparatively so few classrooms today; the first is the cost of equipment and films, and the second is inertia on the part of the teacher—a willingness to let well enough alone —to regard all visual education activity as the work of specialists who have a job to hold, or of dealers who have something to sell.

Furthermore, the school, or the teacher in that school is at once confronted with a series of problems that must be solved if the project is worthwhile, and if effective results are to be accomplished. There is

1. The problem of what films to use and where they are to be obtained.
2. Should they be employed in the classroom or in the auditorium?
3. Should the teacher operate the projector as she would any other piece of school apparatus? Or should the principal or science teacher, the janitor or a bright boy be called on to help teach the class?
4. Must the film be used as a direct correlation with a topic or text book lesson at the time such lesson is being taught? Or can it be used at some other time and yet with adequate values?
5. Must the school own its films, or rent them from some commercial source, as a university, a state department or a company specializing in such rental service?
6. Should the films be of the 35 mm. type or 16 mm?
7. Should such classroom or teaching films be silent or sound?
8. What projector to use and how to get it?
9. How can a room be darkened?
10. How can the whole project be financed in the average school?
11. How can the teacher acquire a knowledge of contents of a film and its various, sometimes numerous, teaching values?
12. What teaching technique must the classroom teacher have before setting forth on this chartless sea?

These are some of the problems that must confront the average school; and in the aggregate they seem insurmountable. But if we consider them, one at a time, the difficulties rather melt away:

1. The average teacher cannot select from the multitude of sources the films she is to use throughout a given school year. She does not have the time, nor has she usually the ability. This work must be done by one who knows both the contents of the films and how they contribute most effectively to the needs of a class; then such a series or course of films, covering the school year, should be adopted by a school just as a textbook is adopted.
2. Is the proper place for educational films in the classroom or the auditorium? By all means in the classroom. This is not to say that a school should not have an auditorium equipment for the showing of films to large groups, the films partly educational and partly recreational in their value. But if honest-to-goodness teaching is to be done, with due preparation, presentation and follow-up, the intimacy and peculiar psychology of the classroom is essential. There the element of a "show" is banished.
3. Must the films be used *only* when the subject involved is being presented in the regular course of study? A would-be authority on visual education in a neighboring university, with a good deal

of self assurance, has said: "Material must be available to the teacher at the precise time it is needed in the learning situation. It is of little value a month or so before or after the time." It is apparent that the person just quoted fails to realize that here are "more things in heaven and earth than are dreamt of in his philosophy." A film on the life of Columbus if shown with proper preparation and follow-up to a class two months before the more formal study of that topic of American history in the classroom, will create such an interest and such a desire to read ahead that the subsequent more intensive study will be tremendously simplified.

4. Should a school own its films or rent them? Ownership carries a certain independence of use, but the cost of films, from $25.00 to $30.00 per reel, makes it impossible for many schools to achieve this permanent possession. The large schools and school systems can have their own film "libraries"; but it is the *average* school we are now considering.

5. Should the films employed be of 35 mm. or 16 mm. width? This would be a needless question were it not for the fact that so many schools have earlier purchased at rather large cost 35 mm. machines, and are now becoming disgusted to find they cannot use them — no films! Such schools are becoming fed-up with the whole idea of educational films, and are communicating their dissatisfaction to neighboring schools. They have run through the gauntlet of professional 35 mm., portable 35 mm., 28 mm., 16 mm., and now sound films; so the natural question is "what's next?" In spite of these rapid changes, it must be admitted that the 16 mm. silent projector and film are the most practical for classroom use, being suitable to place in the hands of the classroom teacher. From the mechanical standpoint such a lay-out is clearly within the operating skill of any teacher, man or woman, from the primary to the university. Most emphatically the teacher should operate the projector. To bring anyone else in for that purpose converts the project into a "show," in place of the conference of pupils and teacher.

6. Then the question of silent or sound films: For the classroom, for day by day service, unquestionably silent films. More effective genuine learning will result if the pupils, under the skillful guidance of the teacher, study the outline and contents of a film, do the talking, give their own reactions to what they see, compare their opinions with one another, than to have them passively listen to a lecture. This is not to discount the tremendous potentialities of sound films in the auditorium or in many exceptional cases; but, again, it is the *average* classroom we are considering. Then, of course, the silent 16 mm. is within the financial and mechanical reach of such average school.

7. But, one will say, what about the projector, its kind and its cost? There are several 16 mm. projectors whose efficiency ranks very high; anyone of them will give 100% satisfaction, most of them being practically "fool-proof", thus requiring the minimum of mechanical skill. And because of the lightness and simplicity of the present day projector, one should be included along with the year's course of films which the school is using from some film library. No investment in an expensive projector would then be necessary. Furthermore the one supplied with the film course would be constantly serviced and kept in perfect repair.

8. We are coming nearer and nearer to the question of how such a film service to a school, involving material for all grades and all teaching subjects, even including the projector, can be financed; obviously there must be an outlay of money somewhere along the line. In smaller schools, even in rural schools the board of education can finance such a service. In larger school systems, involving many rather large schools, the necessary funds can be supplied from the student activity fund, by the parent-teacher association, or by direct contributions by pupils and teachers. Where a group of schools go in together the cost to each can be made relatively small.

9. All-important knowledge of the contents and teaching elements of the films in such a course can most effectively be obtained by both teacher and pupils from a study of carefully prepared outlines and synopsis of the films. Such outlines should be clear-cut and brief; for teachers are busy. The outlines should also be in the hands of a school well in advance of the actual opening of school in September.

10. Then as to teaching technique: One should not disregard the immense value of teacher training in the use of all visual aids. At the same time I am inclined to think that, by and large, experience is a mighty safe teacher in this as in many other pedagogical things we must master. I would not say to any teacher "don't attempt to use educational films till you have had instruction from one who possibly knows more about it than you do." We no longer caution a person to keep away from the water till he knows how to swim. Rather I would urge every teacher, lacking other means, to work out her own salvation although perhaps with fear and trembling; for the main thing is to tackle the job, do the best she can, and success will crown persistent effort. Such a teacher may make mistakes but also may often make real contributions to the sum total of approved teaching technique. I visited a Catholic sister in a one-room parochial school. I wanted to see what she was doing that

(*Continued on page* 236)

The Film Estimates

Being the Combined Judgments of a National Committee on Current Theatrical Films
(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)
Date of mailing on weekly service is shown on each film.
(A) Discriminating Adults (Y) Youth (C) Children

Annapolis Farewell (Sir Guy Standing, Tom Brown) (Para) Sincere, well acted story of Annapolis life, centered around a very wrong-headed midshipman and rare old retired Commander, with fine emphasis on best naval traditions. Patriotic, appealing, very sentimental but gripping even to theatrical climax. 9-17-35
(A) **Very gd.** (Y) **Excellent** (C) **Gd. if not too sad**

Atlantic Adventure (Nancy Carroll) (Columbia) Fairly continuous excitement over assorted crooks on Atlantic liner trying to trick each other out of valuable diamonds. Endless complications, but breezy reporter-hero solves all, arrests all, and wins back his lost job and the intermittently terrified heroine. 9 17-35
(A) Depends on taste (Y) Perhaps (C) No

Big Broadcast of 1936 (Jack Oakie and Radio Stars) (Para) A score of radio acts loosely hung together by wild yarn about a crazy invention and two station owners kidnapped, threatened with death, and their final hectic escape. Includes some fine talent, parts amusing, but whole tiresome. 9-24-35
(A) Hardly (Y) Probably good (C) No

Bright Lights (Joe E. Brown) (Warner) Small-town vaudeville team, man and wife, almost estranged by his sudden rise to star on Broadway with madcap heiress as partner but, disillusioned, he rushes back to wife. Character interest slight. Brown's slapstick antics replace plot. 10-8-35
(A) Good of kind (Y) **Amusing** (C) **Funny**

Condemned to Live (Ralph Morgan) (Chesterfield) Grim, fantastic tale about fine man supposedly marked at birth when mother was killed by huge vampire bat. He develops dual personality, becoming a blood-sucking monster at night, with many victims. His suicide final solution. 9-24-35
(A) Hardly (Y) No (C) No

Dark Angel, The (March, Marshall, Merle Oberon) (U.A.) The well known post-war play splendidly screened. The tensely emotional theme is splendidly acted and directed with extreme skill, as notable for what it omits as for what it includes. A poignant love story convincingly and beautifully told. 9-17-35
(A) **Exc.** (Y) **Very fine tho mature** (C) Beyond them

Der Traumende Mund (Dreaming Lips) (E. Bergner) (German Prod.) Early Bergner film, mechanically and artistically below par, German dialog with poor English titles, and choppy action. Story is slow-moving triangle with suicide as tragic end for unhappy heroine. Bergner's presence only outstanding feature. 10-1-35
(A) Disappointing (Y) Doubtful (C) No

Don Quixote (Feodor Chaliapin, George Robey) (Made in France, English dialog) Highly artistic screening of Cervantes' great character, wistful, tragic, true. Finely acted, set, directed. Accurate in detail, with tempo and atmosphere of the period. A joy to all who know their Don Quixote. 10-1-35
(A) **Excel.** (Y) Mat. but good (C) Beyond them

Gay Deception, The (Francis Lederer, Frances Dee) (Fox) Improbable, romantic whimsy about naive country girl winning $5,000 in lottery and going cityward to spend it. An incognito Prince, as bell-hop, elevator boy, etc., trails her faithfully, carries her triumphantly through social embarrassments. Lederer very engaging. 10-1-35
(A) **Very gd. of kind** (Y) **Very amusing** (C) **Gd.**

Girl Friend (Ann Sothern, Jack Haley) (Fox) Nonsense comedy about actor and pals out of work, who sponge on farm family, produce crazy play as compensation, trick New York producer into seeing it, and he buys it! Amusing moments rather lost in various amateurish mediocrities. 10-8-35
(A) Waste of time (Y) Harmless (C) Funny

Goose and the Gander, The (Kay Francis, Geo. Brent) (Warner) Sophisticated farce. Heroine is ex-wife plotting revenge on husband-snatching vamp, starting new affair with bachelor-hero. Hilarious, but involved situations, ending in romance for bachelor and heroine and return of flirt to her ineffectual husband. 9-24-35
(A) **Amusing** (Y) By no means (C) No

Harmony Lane (D. Montgomery, Evelyn Venable) (Mascot) Artistic, credible, moving story of romance, drama and tragedy of Stephen Foster's life, with charming setting and background of his much-loved melodies. Title role, and one or two others, outstanding in finely acted whole. 10-8-35
(A) **Excellent** (Y) **Excellent** (C) Mature

Healer, The (Ralph Bellamy, Karen Morley) (Monogram) Old Herrick novel of doctor and nurse doing great work for child cripples in humble, rural district. Nurse's cheap but wealthy rival lures him away for "bigger things" but he recovers for happy ending. Mostly convincing. 9-17-35
(A) Fair (Y) Fair (C) Possible

Here Comes the Band (Virginia Bruce, Harry Stockwell) (MGM) Lively musical farce-comedy, often amusing but uneven, with plot built around hero's song stolen by publisher. Numerous comic and romantic complications involve everybody till wildly improbable trial solves all. Plenty of Ted Lewis. Stockwell's singing notable. 10-1-35
(A) Fairly good (Y) **Amusing** (C) If it interests

Here's to Romance (G. Tobin, Nino Martini) (Fox) Rich playboy finances blonde dancer in Paris, his wife does same for young singer. Their "art interest" fades when proteges fall in love. Fine music, Martini's notable singing, and Schumann-Heink's minor role deserve better story. 10-8-35
(A) Fairly good (Y) Perhaps (C) Little interest

His Family Tree (James Barton, Margaret Callahan) (RKO) Labored comedy about an Irishman seeking election as mayor when his heavy-drinking father arrives from Ireland to "help". Becomes mere hash of fights, speeches and songs that bore fully as much as they amuse. 10-1-35
(A) Dull (Y) Worthless (C) No

Hot Tip (James Gleason, Zasu Pitts) (RKO) Lunch-counter owner, playing the ponies, mortgages his home and business to bet on a horse — and wins. Lively tempo and some good comedy by principals, but not enough to redeem feeble plot and weak story. 9-17-35
(A) Feeble (Y) Passable (C) Little interest

Peasants (Russian Production) (Amkino) Realistic portrayal of hog-raising peasants in transition to new Soviet regime. Fine photography of faces and environment. Grows dreary with confused narrative, slow tempo, crudity of benighted life, and ponderous propaganda for collective farming. 10-8-35
(A) Dull (Y) No (C) No

Public Menace (Jean Arthur, Geo. Murphy) (Columbia) Heroine offers scoop on famous gangster to reporter-hero if he will marry her to solve an emergency. Gangster's escape ruins plan and couple wrangles on through complications until accidental capture of gangster solves all. 10-8-35
(A) Hardly (Y) Not the best (C) No

My Song for You (Jan Kiepura) (Gaumont-British) Musical film notable chiefly for Kiepura's fine singing. Implausible but fairly amusing plot tells of star's meeting and romance with Viennese heroine, their usual misunderstandings and separation, and final reunion. Overacting of Sonnie Hale a marring feature. 9-24-35
(A) Fairly gd. (Y) Probably gd. (C) Doubt. int.

Red Salute (Barbara Stanwyck, R. Young) (Reliance) Father-flouting heroine and conceited hero wrangle incessantly through lively adventures, dodging the law from Washington to Mexico and back. Advocates Americanism vs. Reds, but too clumsily to convince. Merely wisecracking comedy. 10-8-35
(A) Mediocre (Y) Hardly good (C) Little interest

Redheads on Parade (John Boles, Dixie Lee) (Fox) Light, frothy bit about what happens backstage on a movie lot, made up of usual ingredients—hero in love with heroine, jealous financial backer, high-powered publicity man, etc. Slight plot prolonged by spectacular dance ensembles and overdone comedy. 9-24-35
(A) Thin (Y) Fair (C) No interest

Silk Hat Kid (Lew Ayres, Mae Clarke) (Fox) Unpretentious little story centering around Settlement House for boys, its wise director, and his loyal secretary. Two crook pals, despite gangland complications, are supposedly won back to right attitudes and happiness. Meant to be wholesome. 10-1-35
(A) Hardly (Y) Doubtful (C) Doubtful

She Gets Her Man (Zasu Pitts, Hugh O'Connell) (Univ.) Crazy slapstick farce in which timid waitress accidentally prevents bank robbery and becomes national heroine through efforts of high-pressure promoter, leading women in war against crime and even reforming gangsters who kidnap her. Exaggerated burlesque stuff. 9-24-35
(A) Absurd (Y) Probably funny (C) Undesirable

She Married Her Boss (Claudette Colbert, Melvyn Douglas) (Columbia) Rather mirthless, unconvincing comedy about skilled secretary who manages to marry her unromantic store-owner boss with desolate home. Clever, outrageous child a factor. Too much of film is dull and drunken ending is stupidly false. 9-17-35
(A) Poor (Y) No (C) No

Super Speed (Preston Foster, Mary Carlisle) (Columbia) Lively, human story, a bit confused by two heroines, about young inventor of device valuable to auto field. Tricked out of it by crooks, chance lets him equip an outboard motor. Wins out in thrilling race-test climax. 9-17-35
(A) Hardly (Y) Fairly good (C) Perhaps

Sweepstakes Annie (Marian Nixon, Tom Brown) (Liberty) Stupid production, with crude acting, banal dialog, unskilled direction, and painfully unconvincing story about dull people. Dumb heroine wins huge prize, goes in for life of luxury, is being rapidly swindled by parasites and crooks until childhood sweetheart saves day. 10-1-35
(A) Stupid (Y) Poor (C) No

Thunder Mountain (Geo. O'Brien) (Fox) Just another western. Hero and pal find gold mine. Villain and pal steal it. Hero gets it back via mighty heroics. Passable plot, notable photography, but mediocre direction and poor dialog. 10-8-35
(A) Mediocre (Y) Passable (C) Better not

Welcome Home (Jas. Dunne, Arline Judge) (Fox) Small town comedy about four city slickers, some worthless bonds, and the village rich man—resulting in the crook-hero tricking him out of $15,000 and donating it for the upbuilding of his home town. 10-1-35
(A) Mediocre (Y) No (C) No

Wiener Blut—Viennese Blood (German cast and dialog) German production, with better than average photography and sound quality. Portrays life of Johann Strauss, his melodies, and the cabal against Die Fledermans, 1870. Fun for Germans but English titles entirely inadequate for general interest in film. 9-17-35
(A) Rather good (Y) No (C) No

William Tell (Conrad Veidt) (Swiss production with English dialog) Historically accurate filming of Swiss revolt under Austrian tyranny in 14th Century, produced in the Alps. Story slow and obscure at times but film notable for majestic scenery and authentic portrayal of architecture, life and customs of the period. 9-24-35
(A) **Interesting** (Y) **Yes** (C) Probably good

Without Regret (Elissa Landi, Paul Cavanagh) (Para) Grim, sensational, largely unpleasant story. Giddy heroine, loose in China, marries heartless adventurer who supposedly dies. His blackmailing mistress threatens heroine's happy second marriage. First husband returns, kills mistress, surrenders, assures heroine's happiness. 9-24-35
(A) Depends on taste (Y) No (C) No

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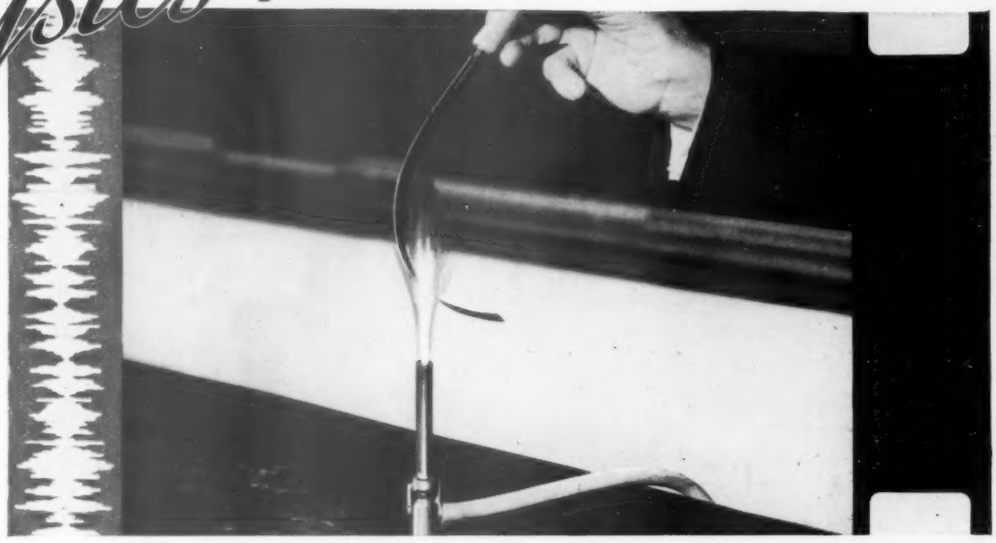

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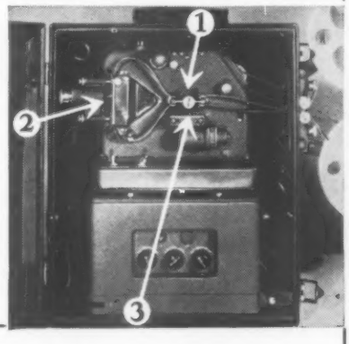

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Film Slide Lessons In Accounting

INSTRUCTION today proceeds largely through a steady verbal attack directed at the minds of students. What is the effect upon the victims? They develop a passive resistance as a defense, and lapse into mental relaxation.

Every alert teacher is in constant search for devices to improve classroom instruction. The inefficient teacher is content with a vocal barrage to convey the pedagogical message. The task of providing for a multiplicity of appeals to the sensory organs involves too great an expenditure of time and effort.

Difficulties are encountered in various subjects. In some of the technical, commercial courses, visual material is not readily available. Although many private firms have produced motion pictures suitable for use in such subjects as business training, none have been prepared for instruction in accounting classes. The preparation of such material would require a considerable expenditure of time and money.

Despite that uninviting outlook, a series of films was planned for private production to be used in bookkeeping classes. At John Adams High School, Mr. Gramet and the writer have prepared several such films. Mr. Gramet had previously produced motion pictures for use in biology classes. Two of these, *Microscopy in High Schools* and *How the Heart Works* have been approved for use in the schools of the city of New York and are in use in many of the high schools.

In the preparation of the accounting films, Mr. Gramet insisted, at the outset, that no topic, which could be taught better in any other way, should be developed in a film lesson. Furthermore, the film strip must represent a complete lesson unit. It must therefore be motivated, and provide opportunity for reflection, summarization and application.

The first topic selected was that of "Closing the Ledger." Accounting students find this one of the most difficult topics in the course. The difficulties in ordinary classroom presentation are due to the time consumed in preparation, the unreliability of student models, and the multitudinous forms required.

In the customary class lesson, the work of preparing the accounts on the blackboard is assigned to the best students. If they follow the usual procedure of ruling all lines to assure tidy work, the teacher may find himself delayed from five to ten minutes in his lesson. If board space is limited, it may be impossible to place all the work before the class. If the board space is adequate, it may be necessary for the class to turn to follow the work at the side or, perhaps, the back of the room.

Then, there will be a further delay for inspection and correction of the board work. That will prevent completion of the lesson in one period, and might necessitate a complete repetition of the preparatory work in the succeeding lesson to permit review before completing the topic. Furthermore, the task of closing the ledger is one that is encountered infrequently

2a

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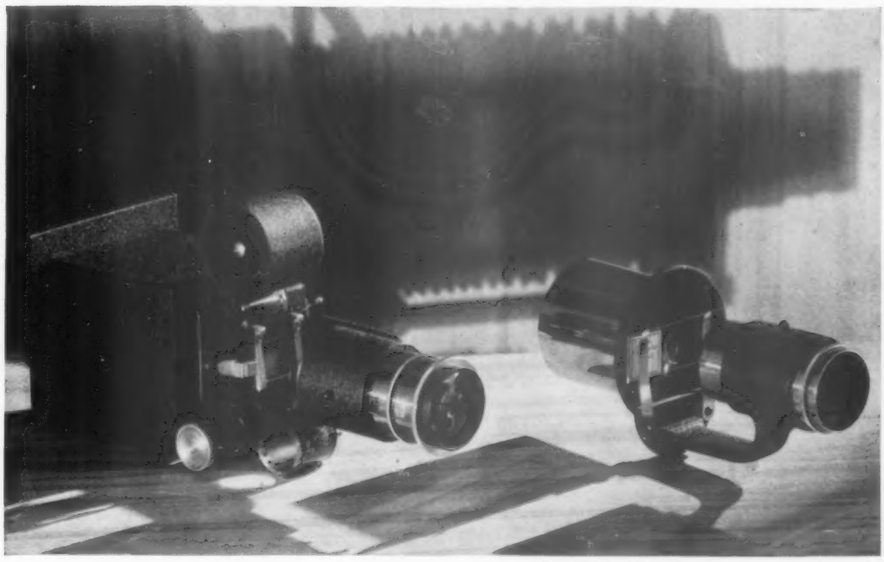

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by the student. The major portion of his work involves mere recording. His only opportunity to summarize the books occurs at the close of the exercise. Then, the teacher will very often neglect the lengthy process of closing the ledger, to spend more time in additional drill upon the recording transactions. The effect is to leave the student with a hazy recollection, (if, indeed, he retains any remembrance at all), of the procedure in closing the accounts.

Should the teacher wish to refresh the students' memory it will most likely be necessary to repeat the burdensome process of reproducing all the accounts on the blackboard to serve as a model for the transfer entries. The difficulties that will then be encountered have already been related. They may be slightly reduced at this time because of familiarity with the procedure.

To the above arguments for an economical method of presenting, drilling and reviewing the subject of closing entries, may be added the need for individual instruction to aid the slower, weaker students. Will individual aid necessitate a repetition of the entire preparatory process for each student requiring assistance? Surely, there must be some practical method of presenting the material required, so that it may be repeated as often as necessary without the laborious preparatory process. To offer such a method is the object of the films prepared for the accounting classes.

(*Continued on page 235*)

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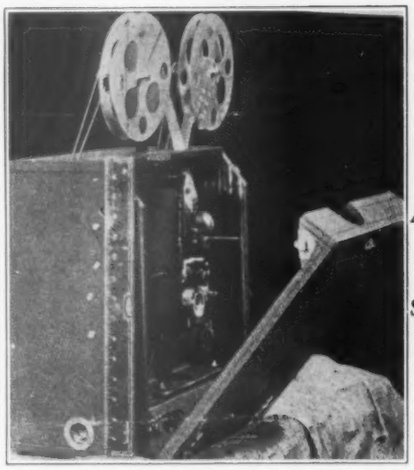

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DAVID COPPERFIELD—PLATE 3

By having these photographs available for detailed study, the following significant highlights can be brought out and developed with balanced continuity:

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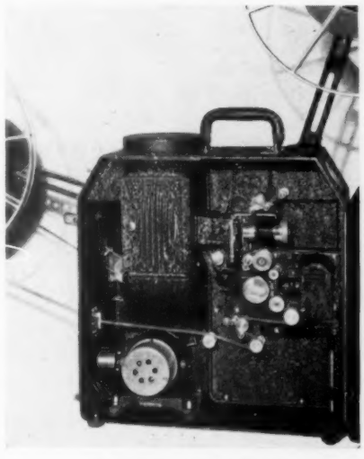

35 MM. FEATURES
500 or 1000 Watt Projector Lamp—Forced Ventilation — Central Oiling — Motor Governor Control — APPROVED BY UNDERWRITERS — Amplification for Audiences up to 2000.

LITERATURE AND PRICES ON REQUEST

Universal Sound System, Inc.
Plant & General Offices
10th and Allegheny Ave. Philadelphia, Pa.

16 MM. FEATURES
Professional Design—Heavy Duty Constructions—Simple Operation—500, 750 or 1000 Watt Projector Lamp—Direct Ventilation—Central Oiling—Speed Control for Sound or Silent Pictures—Amplification for Audiences up to 1000.

(*Continued from page 233*)

The first film is intended for the elementary classes in bookkeeping. The transfer entries are revealed as links in a chain to determine the capital of a business. A preliminary problem challenges the student to a simple mathematical determination of profit from three figures of sales, cost and expense. This solution by the pupils then serves as a skeleton of the entries used by the bookkeeper to record that information in accounting fashion.

As each account is projected on the screen, analytical questions are asked by the teacher to develop the bookkeeping record. The use of stillfilm permits freedom of questioning upon any picture portrayed on the screen. In perparing this visual lesson, Mr. Gramet selected stillfilm in preference to slides to overcome the disadvantage of loss and breakage in the use of slides and to insure exact sequence of pictures. Although that decision necessitated more work and greater expense, the advantage of the method justified the choice. Too often a slide lesson consists of a loose collection of slides with no unified objective, or a collection assembled with absolute disregard of the requirements of good teaching procedure in a lesson unit.

The pictorial presentation of accounts permits a free discussion that develops richer concepts of such abstract bookkeeping expressions as "total cost of merchandise available for sale," and "cost of goods sold." Through the medium of the film, the student is enabled to see the interrelation of his simple arithmetical solution, the accounting report or Statement of Profit and Loss, and the bookkeeping record in the ledger. He can see that the entire accounting procedure is merely a technical manner of recording and reporting the elementary problem solved mathematically at the beginning of the lesson. This multiple approach—through arithmetic, Statement of Profit and Loss, and ledger—enriches the students' understanding of the closing records.

Three times in the course of the film lesson, opportunities are provided for a summary of the knowledge gained. The Sales Income account permits a review of the trading section of the Profit and Loss Statement and the arithmetical computation of gross profit from figures of sale and cost. The Profit and Loss account affords a similar opportuntity for discovering the similarity between "overhead" expenses in the mathematical solution and the operating section in the Profit and Loss Statement. A summary is offered at the conclusion of the lesson, through the presentation of a chart to illustrate the sequence of the transfer entries.

The other film is intended for use in more advanced classes. There, the lesson is based upon the use of the Statement of Profit and loss as a guide to aid in the preparation of journal entries for closing the

(*Concluded on page 243*)

Film Preservation . . .

Your films are important, irreplaceable and fragile records. Constantly projected, they become scratched and marred. If not in use, the gelatine turns adhesive resulting in bare spaces unmarred by the slightest trace of picture.

Treat your old Films with

Teitel's New Life Solution

This keeps film flexible and lubricated, acts as a cleansing agent, removes all foreign substances, gives greater clarity of image, prevents buckling and curling and prolongs its life. It prevents New Film Deterioration and is a thoroughly Safe preparation.

Price per 6 oz. bottle.....$1.00

Booklet T on request

KIN-O-LUX, Inc. 105 W. 40th STREET NEW YORK

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COVERING THE SCHOOL FIELD EXCLUSIVELY

SCHOOLS—High, Grade, Private, Colleges, etc.
TEACHERS—By territory, subjects, grades, sex, etc.
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Student Supply Stores, College Co-Op. Stores, etc.
Envelopes addressed — entire mailing campaigns handled.

Send For Fall 1935 Bulletin Outlining Above Lists

EDUCATIONAL LISTS CO., Inc.

110 West 40th Street, New York City
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The World Famous HOLMES Educator Sound on Film Equipment

For small or large auditoriums, 35mm. Standard Film

Complete

Can now be purchased by Educational Institutions FOR

$175 down

Balance 19 equal small monthly payments

No interest

No carrying charges

The first and only ball bearing projector and sound head built in one unit — no attachments.

Demonstration Free

One Year Guarantee

Full details on request.

SEE IT! HEAR IT!

HOLMES PROJECTOR COMPANY

1813 Orchard Street CHICAGO

Systematic Visual Education in the Average School

(*Continued from page 229*)

day with a simple 16 mm. projector and some educational films. She was not embarrassed, nor was she at a loss as to what to do or say. In truth she said very little, but her flock was alive, and as she herself ran the film on "the butterfly" they were keen to interpret what they saw and tie it in with their experiences. Then when the quiet sister gave them some of Emily Bradley's poem "A Chrysalis" with the lines:

> "So when I told her what would be
> Some day within the Chrysalis;
> How, slowly, in the dull brown thing
> Now still as death, a spotted wing,
> And then another would unfold,
> Till from the empty shell would fly
> A pretty creature, by and by,
> All radiant in blue and gold."

gently pointing out the parallel between the metamorphosis of the insect and the development of human life, the lesson with its profound impression on her pupils was complete; and I felt that this sister (untrained in visual education) had handled that subject and her class far more skillfully than I could have done.

In closing I want to stress again three things which from the beginning I have endeavored to make clear:

1. If worthwhile and *systematic* uses of educational motion pictures are to be made in the *average* school a definite yearly program or schedule of films should be adopted before a school opens in September; and practical and easily usable outlines of all films in such course should also be in the hands of the school to distribute to the various teachers at the opening.

2. That it should be recognized that educational films have enormous teaching values in connection with the set course of study, either as a preview, an overview or a summarization, even though they may not be presented to a class at the exact time the subject involved is studied more formally; and that many if not most films may be used independently of any curriculum or textbook. Such a use is an approach to a course in visual education.

3. That most educational films have decided teaching values in more than one teaching level and in more than one school subject. The would-be authority quoted earlier in this paper says: "Dual-

purpose films are of little value educationally, and they furnish very poor entertainment." It is not clear why it is assumed that dual-purpose films have or should have *any* entertainment value! However, it can easily be established that such a film as "Grass" has one value in geography in the grades, another value in history, and another value in more advanced classes in connection with problems of individual psychology or problems of sociology. One principal says his teachers use the film on "The Butterfly" in classes in English, in Nature Study, in General Science, in Zoology, in Geography and in Art.

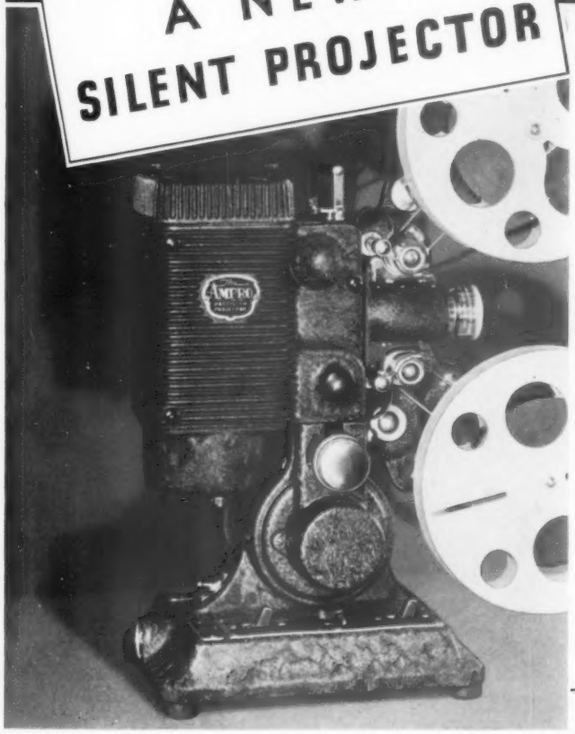
As illustrative of what I have attempted to put before you in this paper, I am taking the liberty to hand you the yearly program* as adopted in a single school, this program being typical of what is being done in many other schools. No claim is made that the plan is perfect in all details; but it is one that seems to work in the average school, and one wherein the pupils in the average school (in the primary and even in the rural school) are given the inspiring and vitalizing influence of thoroughly educational films.

*Copies of this program were supplied to the audience.

H. S. BROWN, Inc.
6 NO. MICHIGAN AVE., CHICAGO
Complete selection of MOTION PICTURES in 16mm and 35mm for Education and Entertainment.
Offers unique 16 mm. Film Rental Service
Please send for free literature.

Now Booking
The original, authentic production of
The Passion Play
Photographed amid the old world settings of Ancient Judea, depicting the life of Christ from the Manger to the Cross
Shown and endorsed by leading churches of the country.
6 reels—35 mm. sound-on-film—Synchronized with fine singing, symphonic music, and descriptive talking throughout by excellent accompanying voice.
Western Electric Noiseless Recording
Also Available in 8 reels, an all color 35 mm. silent version
THE SON OF MAN
Book now for Christmas Holiday showings while open dates are still available.
Bland Brothers 1018 S. Wabash Ave. Chicago, Illinois

At Last!
A NEW SILENT PROJECTOR



Expressly designed for
CONVERSION TO SOUND!

NOW! YOU CAN ATTACH SOUND LATER AND SAVE THE USUAL COSTLY REPLACEMENT CHARGE

Model "R" — $210. Silent Projector

The new AMPRO Model "R" 16 mm. silent projector (750 Watt Lamps) not only assures you the finest silent projection available but it actually will save you a great deal of money whenever you are ready to combine Sound with this type of visual education. Instead of then buying a new machine and losing your investment in the silent projector, simply send this remarkable model "R" to our factory and have it converted to sound at a cost MUCH LESS than the price of a new sound-on-film machine. See this amazing model today—operate it—notice how brilliantly and clearly it projects, how easily and quietly it runs. Examine the built-in attachments for conversion to sound. Check it point for point with any other machine and prove to yourself that AMPRO gives you far more Performance, Durability and Economy.

OTHER SILENT PROJECTOR VALUES: 16 mm. AMPRO offers two other splendid series of silent projectors. One for use with 750 Watt Lamps, the other for 500 Watt Lamps. Interchangeable with 200, 300 and 400 Watt Lamps without adjustment. Featuring: Finned lamp house for cool operation under all conditions, automatic rewind, reverse action, framer for out of frame prints, interchangeable lenses, and patented kick-back claw movement which spares the film from sprocket hole wear. Priced from $135 with carrying case and all accessories.

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16 mm. Sound-on-film **MOVIES** Silent 16 mm.
Write for free descriptive lists.
We are determined to maintain the lowest rates in the U. S. A.
All programs unconditionally guaranteed.
Organized for service — not for profit.
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GLASSIVE — an abrasive for making your own ground glass slides from plain cover glass for a fraction of a cent each. **50c a package.**
CELLOSLIDE—Eliminates the necessity of writing on glass. Takes ink better than glass. **500 sheets for $1.00.**
(Dealers Wanted — Write for terms)
TEACHING AIDS SERVICE, JAMAICA PLAIN, MASS.

Y. M. C. A. MOTION PICTURE BUREAU FOR
FREE FILMS FREE CATALOG
Silent and Sound 16 mm. and 35 mm.
Also hundreds of subjects at lowest rental rates.
347 Madison Ave., N.Y.C. 19 S. LaSalle, Chicago, Ill.
(Over 1000 school systems served last year)

Again
This Remarkable Screen Value
9'x9' Screens for $14.50
(Regular $60.00 Value)
For use in your auditorium — or cheap enough to cut up for classroom use.
A good screen is essential for good projection. These screens are made of perforated mat white material. For sound or silent projection. Equipped with pole ready for hanging. (Metal roller for screen $4.50 extra.) They are a genuine bargain at this price.
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BLUE LIST *EXCEPTIONAL SUBJECTS FOR POPULAR EDUCATION and* FINEST FOREIGN FEATURE FILMS
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"Professional Theatre Performance"
AN AMAZING OFFER
16 mm. & 35 mm.
SOUND-ON-FILM EQUIPMENT
$195.00 Projector Only

For As Little As $50 Down
To organizations with limited funds we offer the advantage of a complete
CINEMAPHONE 16 MM. EDUCATOR
sound-on-film outfit in easily paid-for units.
Silent 35mm. projectors converted to sound-on-film at small cost.

Write for prices on accessories, amplifiers, lamps, lenses, microphones, photocells, reels, screens, etc.
S. O. S. CORP.
1600 BROADWAY, NEW YORK, N. Y.

Film Production Activities

Football Series in 16 mm. Sound

Walter O. Gutlohn's timely announcement of the release of six one-reel football subjects in 16mm sound and dialogue, should arouse great interest among coaches, students, alumni groups, and football fans in general. This splendid series, *Football for the Fan*, was made in cooperation with Howard H. Jones, coach of the University of Southern California, and twenty-five of the leading coaches of the country, and shows plays by practically every major varsity team. Titles of the single reels are: *Spring Training, Wedge Play, Deception, Forward Pass*, and *Penalties*.

More Sound Material for 16 mm. Field

The new "Blue List of Exceptional Subjects", issued by Garrison Film Distributors, New York City, includes some of the finest 16mm sound-on-film material available to non-theatrical groups. In the field of travel and exploration, for instance, they have *Hell Below Zero, To the South Seas* (with the Pinchots), *Savage Gold, Zane Grey's South Sea Adventures, Mexico, Lost Gods, Pompeii*, and other Talking Picture Epic productions. The nature study group includes *Killing the Killer, Killing to Live, Evolution, Like a Beaver, Wild Appetites, Freak Fish of the Seven Seas*, etc.

Many distinctive foreign films are also available from this source on a rental basis. Among them are the Rene Clair productions, *Le Million* and *A Nous la Liberte, Poil de Carotte, A King Is Made* (formerly the *Marionettes*), *Fra Diavolo*, a dramatic Italian operetta, *Doll's Fantasy* and *Impressions of Naples*, two Italian musicals.

Religious Films Released by Filmosound Library

The release of fourteen one-reel motion picture episodes based on Old Testament stories is announced by the Bell & Howell Filmosound Rental Library. This non-sectarian 16 mm. sound-on-film series offers the following titles: *Creation; Cain and Abel; Noah and the Ark; The Deluge; Abraham; Migration; Abraham and Lot; The Rescue of Lot; Isaac, the Boy; Ishmael; The Sacrifice of Isaac; Isaac and Rebekah; Jacob and Rachel;* and *The Return of Jacob.*

This series was produced in Hollywood, under the personal supervision of Rev. Harwood Huntington. It is said that no expense or effort was spared to assure authenticity in even the smallest detail. The narration, by Wilfrid Lucas, is reverent and based upon sound Biblical scholarship, and the sound effects are effective.

Each reel is independent of the rest and complete in itself, for separate showings without reference to any of the others. However, the reels can readily

ONE! TWO! THREE! GO!
Threading is as simple as that!

By special arrangement

with the R. C. A. Manufacturing Company of Camden, N. J., we have the exclusive right to offer their 16 mm. Sound projectors on a deferred payment plan, together with a program service from our 16 mm. sound-on-film library.

No interest charges—
No carrying charges

This deferred payment plan is available only to SCHOOLS, CHURCHES, HOSPITALS and similar institutions.

WALTER O. GUTLOHN, Inc.
35 WEST 45th ST.
NEW YORK CITY, N. Y.

be grouped together into a continuous feature picture, or projected serially. In the latter case, a brief narrative review of the preceding reel, with high spots of the motion picture used in that reel, introduces each reel when it is shown in the series.

Plymouth Issues Safety Subject

As a part of a vigorous campaign to teach the principles of safe driving, Plymouth Motor Corp. has just put out a motion picture under the appropriate title *Everybody's Business*. The film, which is to be shown in thousands of motion picture theaters, dramatically presents the major causes of motor car accidents by analyzing the reasons behind them. The film also will be shown by automobile dealers and distributors, by police departments as a feature of safety campaigns, by schools, colleges, and clubs.

International Educational Pictures to Issue Semi-Annual Catalogs

International Educational Pictures, Inc., film clearing house of Boston, announces a new policy whereby their film directory *Motion Pictures of the World and Its Peoples*, will be published twice a year instead of once a year as heretofore, issues to be available in February and September, the subscription price of 35c to cover both issues. Although not publishing any Fall issue this year, they are making the new arrangement effective immediately by giving present subscribers the 1935 issue and the Spring 1936 issue for the one fee.

Don't miss your copy of
LEICA MANUAL
A new 500 page book on all phases of Leica photography. Write for circulars—or, better yet, see it at any Leica dealer's. Price $4.00.
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PRINCIPLES OF PHYSICS The visualization of high school physics on 35 mm. film slides for classroom use.
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Descriptive literature and sample strip of typical frames sent on request. Address:
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TALKING PICTURES FOR CLASSROOMS
Series "A" for High Schools Series "B" for Grade Schools
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Also entertainment and educational 16 mm. and 35 mm. motion Pictures, both Silent and Sound; Glass Slides, Film Strips, Projectors, Stereopticons, Screens, Accessories. Ask for supplement.
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Talk from your screen with quickly
TYPEWRITTEN MESSAGES
50 Radio-Mats $1.50
White, Amber, Green
Accept no substitute.
RADIO-MAT SLIDE CO., Inc.
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Among the Producers

Where the commercial firms—whose activities have an important bearing on progress in the visual field—are free to tell their story in their own words. The Educational Screen is glad to reprint here, within necessary space limitations, such material as seems to have most informational and news value to our readers.

New Ampro Silent Projector Designed for Conversion to Sound

This month, Ampro brings out its new Model "R" 16 mm. Silent Projector (750 Watt Lamp). It has been designed for those who want to start with silent equipment but who will want sound-on-film performance later on. This Ampro machine embodies certain mechanical features that will permit the later attachment of sound. When Sound is desired, the Ampro factory can convert the Model "R" accordingly. In this way, the owner of a Model "R" does not lose his investment in his silent projector but is charged merely for the conversion. This contrasts very favorably with the old way of "junking" the silent projector when sound-on-film equipment is purchased. Naturally, the Model "R" also contains all the Ampro features found in their regular lines of Silent Projectors.

16 mm. Projector-Library Plan Announced By RCA and Gutlohn

A new plan designed to provide non-theatrical institutions with a practicable method for acquiring the most advanced type of 16-millimeter projection equipment and a dependable program service through deferred payments, has been announced jointly by the Visual Sound Products Division of the RCA Manufacturing Company and the Walter O. Gutlohn Company, widely known film library service organization.

Under this plan, schools, hospitals, civic and social organizations and other non-theatrical institutions may contract for the necessary RCA 16-millimeter sound equipment and a minimum of 10 complete programs in as many months, made up of feature pictures and short subjects, drawn from an existing library of more than 100 complete programs. The plan is being carried out under the supervision of Walter O. Gutlohn, New York City, to whom any inquiries should be directed.

Solutions for Film Preservation

After a lengthy and exhaustive series of experiments, whose purpose was to formulate solutions that would prevent film deterioration, the processes known as *Teitel's New Life Method* and *Teitel's Scratch Proof Method* were invented by Albert Teitel and have been used since then in the efficacious treatment of amateur and professional motion picture film. The *New Life Method* was used for the rejuvenation of dry, brittle, old film. It rendered film sufficiently moist to insure pliability—kept it flexible and lubricated throughout its entire surface and in addition, removed all extraneous substances, cleaned it, provided it with a greater clarity of image, prolonged its life and prevented it from buckling and curling. The *Scratch Proof Method*, a complementary but contrasting process was used exclusively for the treatment of new film. It hardened the emulsion without affecting the cellulose base of the film, rendering it immune to scratches and abrasions from ordinary use.

Although primarily intended for the treatment of motion picture film, the new interest in photographic methods aroused by the advent of miniature cameras of the Leica and Contax type, the perforated 35 mm. film used in these cameras and the necessity for keeping these long film strips in good condition, evoked a vast number of inquiries from careful photographers who in constantly augmenting number requested information on safe methods for preserving their film.

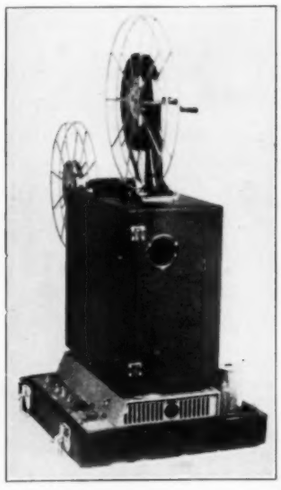
As a consequence, the firm of Kin-O-Lux, Inc., the

Syncrofilm Sixteen

Try Before You Buy--

Value is the watchword of the day — no matter what you are buying. This is as true of projection equipment as it is of anything else.

There is not a better value to be had in the 16 mm. sound-on-film projector market than SYNCROFILM SIXTEEN, dollar for dollar it gives you as much value as your money can buy —



BUT --- Don't Take Our Word For It ---

See for yourself, ask us for a demonstration, a real demonstration, in your own schoolroom or auditorium, side by side with any other 16 mm. sound equipment. Then you'll understand why SYNCROFILM SIXTEEN is the logical projector for your use.

Weber Machine Corp.

Manufacturers of 35 mm. and 16 mm. Sound Projectors

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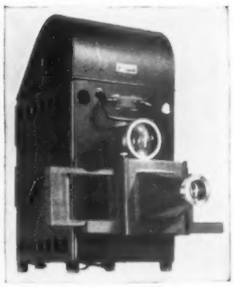
EXCELLENT as any *word description* may be, it is susceptible to individual interpretation. The student's impression may not only be adversely individual but also hazy and incomplete. If you could examine a number of these impressions how many of them would you find accurate and as intended? The answer is obvious!

But when lessons are accompanied with Balopticon pictures, every student gets a correct mental image that he understands and remembers. He knows because he has seen!

Better grades for the student and greater teaching capacity for the instructor are gained with a B & L Balopticon. These instruments are a necessary part of efficient teaching. Write for details to Bausch & Lomb Optical Co., 688 St. Paul Street, Rochester, N. Y.



Model KOSB Combined Balopticon for either lantern slides or opaque objects.

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WE MAKE OUR OWN GLASS TO INSURE STANDARDIZED PRODUCTION

FOR YOUR GLASSES, INSIST ON B & L ORTHOGON LENSES AND B & L FRAMES

Three New Titles

in

Keystone Series

of

Geography Units

Unit Number 18: Scattered American Lands

Unit Number 19: Our Neighbors in Eastern Canada

Unit Number 20: Our Neighbors in Western and Northern Canada

Whether you wish to place these Keystone Units in a school or to send them out from a central bureau, you will find the Teachers' Manual, prepared for each unit by Zoe A. Thralls, of inestimable value in the use of the stereographs or lantern slides.

A Sample Teachers' Manual Will Be Sent on Request

Keystone View Co.

MEADVILLE, PENNA.

owners of *New Life* and *Scratch Proof* Methods decided to manufacture these preparations in concentrated solution form which could be applied by the miniature camera man or amateur movie maker to his own film. Kin-O-Lux, Inc., New York City, will be happy to send interested readers further information on request.

Bell & Howell 1000-Watt Sound Projector

A 1000-watt 16 mm. sound-on-film talking motion picture projector for use especially in large auditoriums with audience capacities of 2000 and more persons, has been brought out by Bell & Howell. The picture-projecting component of the new Filmosound is, fundamentally, the silent 1000-watt Filmo auditorium projector, which shows most effective pictures up to 16 feet in width. It was one of these 1000-watt silent 16 mm. machines that was used recently for presenting the motion picture accompaniment of a lecture given under the auspices of the National Geographic Society in Constitution Hall, Washington, D. C., which auditorium seats 4000 people.

Because of the size of the auditoriums in which the new sound picture projector is to be used, a separate-unit high-fidelity amplifier of exceptionally high-power output is employed, which is said to fill any average-sized theatre or auditorium.

Provision is made for the operation of two film projectors, with the necessary changeover controls. Changeover is made in the sound and picture simultaneously, by a single control.

Spencer Lens Company News

Spencer Lens Company announces that negotiations have been completed whereby the American Optical Company has acquired a substantial interest. H. N. Ott, President of the Spencer Lens Company, states: "With the American Optical Company's one hundred years of experience and success in its field of opthalmic lenses, spectacle frames and mountings, spectacle cases, safety goggles and instruments and equipment used by oculists, optometrists and opticians, to guide and assist, the Spencer Lens Company will be able to progress even more rapidly through enlarged manufacturing resources, and new and important development work.

The name *Spencer* in optics has been synonomous with quality for nearly a century. The present products of the company comprise microscopes, microtomes, projection and other apparatus, having a wide recognition and acceptance in the scientific world.

The business of the Spencer Lens Company will continue to be operated under the same name, policies and personnel, with executive offices and manufacturing plant at Buffalo, N. Y., as at present."

SIMPLIFY PICTURE PROJECTION

With This Time-Saving Screen!

THE DA-LITE CHALLENGER

No time is lost clearing a desk or table for a place to set the Challenger Screen. A folding tripod is permanently attached to the case, in which the screen is mounted.

Before the students are settled in their seats, the Challenger can be set-up and ready for use. Just open the legs, swing the case to horizontal and lift the screen! Spring locks, instead of set screws, permit quick, and positive adjustment to any height. In the larger screens, the lifting is done by crank and gear.

Unless otherwise specified, the Challenger is finished with the famous Da-Lite Beaded surface which gives amazing sharpness, depth and brilliance to movies and stills. Light in weight, the Challenger may be carried easily from room to room.

The Da-Lite Challenger (including the Standard and DeLuxe models) is made in six sizes from 30" x 40" up to and including 70" x 94". It is one of a complete line of DaLite portable screens. Ask your dealer or write us for full details!

DA-LITE SCREEN COMPANY, Incorporated
2723 NO. CRAWFORD AVE. CHICAGO, ILL.

(*Concluded from page 235*)

ledger. The statement is subdivided into its component parts. To each segment of the statement is appended an abstract of the corresponding group of ledger accounts. This method develops a keen comprehension rooted in the interrelation of ledger and statement.

To extend the scope of these visual lessons, additional films are now being prepared. For use in classes in business training, a motion picture on "Filing" is in preparation.

By IRVING ROSENBLUM
John Adams High School, Brooklyn, N. Y.

University Motion Picture Course

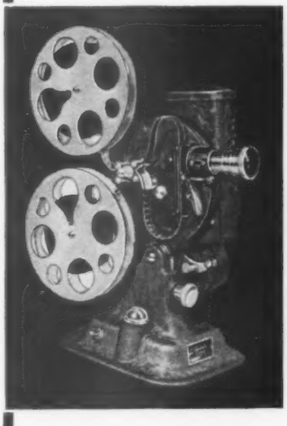
New York University is offering again this year a course on "The Motion Picture; Its Artistic, Social, and Educational Aspects," under the direction of Dr. Frederic M. Thrasher, Associate Professor of the School of Education, in cooperation with the National Board of Review of Motion Pictures. Dr. Thrasher reports that last year the course had approximately 125 students and the number is expected to be doubled in 1935-36. The course confers full college credit and may be taken on the graduate level. It is of especial interest to the layman as well as the teacher.

The auditorium of the new School of Education has been fully equipped with the most recent sound projectors, which will enrich this year's course with illustrative showings of a variety of interesting sound and silent films.

KEYSTONE

Model A-78

PROJECTOR



The Finest Projector Ever Offered Under A Hundred Dollars!

Here's a projector that throws theatre quality pictures . . . sharp . . . flickerless, besides being noted for its simplicity of threading and availability of moving parts.

500 Watt pre-focus lamp.
Forward and reverse drive.
New Cooling system — cools while projecting stills.
Pilot Light.
Picture size—up to 14 ft. wide.
Knob swivel device for tilting.
Safety shutter for stills.

$78.50
Complete with Carrying Case

If you wish more power than 500 Watt . . . write for catalogs and price of the 750 Watt—VICTOR—BELL & HOWELL—and AMPRO Projectors.

Write for 10th ANNIVERSARY CATALOG listing all Photographic items.

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National Brokers Cinemachinery & Photographic Equipment
407 W. WASHINGTON FORT WAYNE, INDIANA

Here They Are

A Trade Directory for the Visual Field

FILMS

Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City

H. S. Brown, Inc. (1, 4)
6 N. Michigan Ave., Chicago
(See advertisement on page 237)

Eastin 16 mm. Pictures (6)
(Rental Library) Davenport, Ia.

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Edited Pictures System, Inc. (1, 4)
330 W. 42nd St., New York City

Erpi Picture Consultants, Inc. (2, 4, 5, 6)
250 W. 57th St., New York City

Garrison Film Dist. Inc. (5)
729 Seventh Ave., New York City
(See advertisement on page 238)

Walter O. Gutlohn (5)
35 W. 45th St., New York City
(See advertisement on page 239)

Guy D. Haselton's TRAVELETTES
7901 Santa Monica Blvd., Hollywood, Cal. (1, 4)

Ideal Pictures Corp. (3, 6)
30 E. Eighth St., Chicago, Ill.
(See advertisement on page 239)

International Cinema League (3, 5)
11 W. 42nd St., New York City

International Educational Pictures, Inc.
40 Mt. Vernon St., Boston, Mass.
(See advertisement on page 232)

The Manse Library (4, 5)
Box 8, Elmore, O.
(See advertisement on page 238)

Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.

Ray Bell Films, Inc. (3, 6)
2259 Ford Rd., St. Paul, Minn.

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Corp. (3)
Rockefeller Center, New York City
(See advertisement on page 234)

Visual Education Service (6)
470 Stuart St., Boston, Mass.

Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.

William A. Dudley Visual Education Service (4)
756 S. Wabash Ave., Chicago
(See advertisement on page 213)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y.M.C.A. Motion Picture Bureau (3, 6)
347 Madison Ave., New York City
(See advertisement on page 238)

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (6)
2839 N. Western Avenue, Chicago
(See advertisement on page 237)

Bass Camera Company (6)
179 W. Madison St., Chicago
(See advertisement on page 233)

Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago, Ill.
(See advertisement on inside back cover)

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Edited Pictures System, Inc. (1)
330 W. 42nd St., New York City

Erpi Picture Consultants, Inc. (2, 4, 5, 6)
(Western Electric Sound System)
250 W. 57th St., New York City

Herman A. DeVry, Inc. (3, 6)
1111 Center St., Chicago
(See advertisement on page 214)

Holmes Projector Co. (3)
1813 Orchard St., Chicago
(See advertisement on page 236)

Ideal Pictures Corp. (3, 6)
30 E. Eighth St., New York City
(See advertisement on page 238)

International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)

Motion Picture Accessories Co. (3, 6)
43-47 W. 24th St., New York City
(See advertisement on page 232)

RCA Manufacturing Co., Inc. (5)
Camden, N. J.
(See advertisement on page 231)

Regina Photo Supply Ltd. (3, 6)
1924 Rose St., Regina, Sask.

S. O. S. Corporation (3, 6)
1600 Broadway, New York City
(See advertisement on page 238)

Sunny Schick, National Brokers (3, 6)
407 W. Washington Blvd.
Fort Wayne, Ind.
(See advertisement on page 243)

United Projector and Film Corp. (3, 4)
228 Franklin St., Buffalo, N. Y.

Universal Sound System, Inc. (2, 5)
10th and Allegheny Ave., Philadelphia, Pa.
(See advertisement on page 235)

Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 216)

Visual Education Service (6)
470 Stuart St., Boston, Mass.

Weber Machine Corp. (2, 5)
59 Rutter St., Rochester, N. Y.
(See advertisement on page 240)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da-Lite Screen Co.
2721 N. Crawford Ave., Chicago
(See advertisement on page 243)

Motion Picture Accessories Co.
43-47 W. 24th St., New York City
(See advertisement on page 232)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

Conrad Slide and Projection Co.
510 Twenty-second Ave., East Superior, Wis.

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
30 E. Eighth St., Chicago, Ill.
(See advertisement on page 238)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 242)

Radio-Mat Slide Co., Inc.
1819 Broadway, New York City
(See advertisement on page 239)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 233)

Victor Animatograph Corp.
Davenport, Iowa
(See advertisement on page 216)

Visual Education Service
470 Stuart St., Boston, Mass.

Visual Sciences
Suffern, New York
(See advertisement on page 239)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

Herman A. DeVry, Inc.
1111 Center St., Chicago
(See advertisement on page 214)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 242)

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.
(See advertisement on page 241)

E. Leitz, Inc.
60 E. 10th St., New York City
(See advertisement on page 239)

Regina Photo Supply Ltd.
1924 Rose St., Regina, Sask.

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 233)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates firm supplies 35 mm. silent.
(2) indicates firm supplies 35 mm. sound.
(3) indicates firm supplies 35 mm. sound and silent.
(4) indicates firm supplies 16 mm. silent.
(5) indicates firm supplies 16 mm. sound-on-film.
(6) indicates firm supplies 16 mm. sound and silent.

Continuous insertions under one heading, $1.50 per issue; additional listings under other headings, 50c each.

FILMO MOVIES
are Kind to Children's Eyes

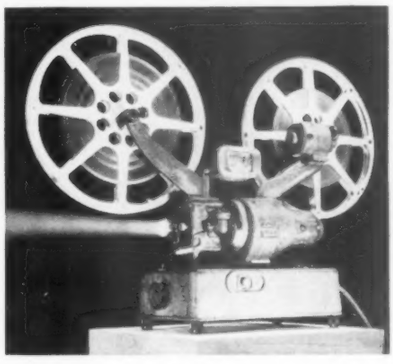
FILMO PROJECTORS are kind to the eyes! Their pictures are flickerless because the Filmo 9 to 1 intermittent ratio is scientifically correct. Here Filmos are definitely superior even to theater projectors.

Filmo pictures are rock-steady on the screen because of the microscopic precision of all film handling parts and the perfection of film registration, both vertical and lateral, at the aperture.

There are Filmo Projector models to supply ample brilliance upon even the largest screen used in your school. All Filmo Projectors illuminate every part of the screen with practically equal brilliancy.

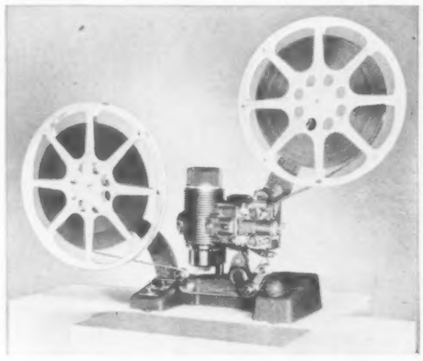
Other features which recommend Filmos for school use: constant dependability, ultimate economy because of long life, ease of operation, simplicity of maintenance, and a background of 28 years of professional cinemachinery design and manufacturing.

There are Filmo 16 mm. Projector models for every need. Three of them are pictured below.



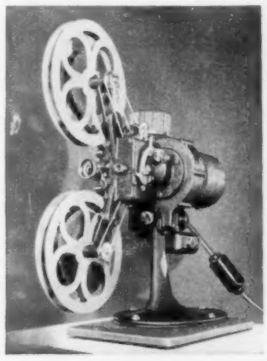
1000-Watt

Adequate illumination for the largest auditorium. 1600-foot film capacity (one-hour showing); F 1.65 lens; variable lamp resistance; voltmeter; variable speed governor (16 to 24); separate motor for take-up and fast power rewinding; pilot light; interlocking controls; two-way tilt; film conditioner; low center of gravity; adequate cooling for the 1000-watt lamp.



750-Watt

Similar in appearance to the Model 130, but for smaller audiences. 1600-foot film capacity (one-hour showing); power rewind; two-way tilt; pilot light; reverse; still projection. The 750-watt lamp may be replaced with a lower powered lamp when less illumination is needed and greater economy is desired. Variable resistance and voltmeter are optional.

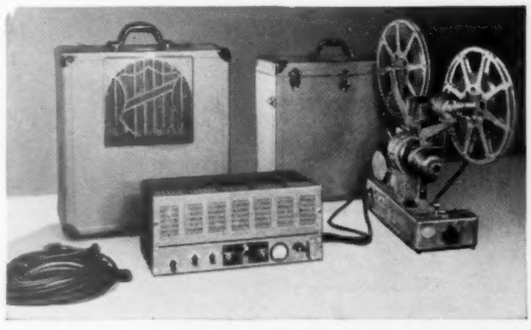


500-Watt

A low cost projector, but with the same basic operating mechanism as Filmo 129. Has 2-inch F 2.1 lens; two-way tilt; power rewind; lamp switch; reverse; still projection; 400-foot film capacity. 500-watt and 750-watt models.

Filmosound Sound Movie Reproducers

Sound movies — real, professional-quality sound movies on 16 mm. safety film — are now available for every school. The Bell & Howell Filmosound is the machine for the purpose. 1000-watt and 750-watt models. Highly perfected, simple to operate, and giving theater-quality results, the Filmosound may be had from a nearby dealer on a low-cost rental plan. The Filmosound Library provides the latest and finest sound films for education and entertainment. See your dealer today for full particulars.



1000-Watt Filmosound

Bell & Howell FILMO *16 mm. Movie Cameras & Projectors*

1817 Larchmont Ave., Chicago; New York, Hollywood, London (B & H Co., Ltd.) Established 1907.

ESSENTIAL

ONE great feature is essential to the motion picture in its steady advance as an educational instrument . . . *safety*. Audience, projectionist . . . building . . . all must be protected. And they *can* be, without recourse to an enclosing booth, by using Eastman Safety Film exclusively. Specify it . . . invariably . . . when you buy or rent motion pictures. Eastman Kodak Company, Rochester, N. Y. (J. E. Brulatour, Inc., Distributors, New York, Chicago, Hollywood.)

EASTMAN

SAFETY FILM